

# **EXHIBIT A**

**UNITED STATES DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF TEXAS  
FORT WORTH DIVISION**

UNITED STATES OF AMERICA,	)	
	)	
<i>Plaintiff</i>	)	
	)	
v.	)	Case No. 4:21-cr-00005-O
	)	
THE BOEING COMPANY,	)	
	)	
<i>Defendant.</i>	)	
	)	

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**MOTION AND MEMORANDUM OF RECOGNIZED CRIME VICTIMS' FAMILIES  
NAOISE CONNOLLY RYAN, ET AL. REQUESTING THAT THE COURT NOT  
ACCEPT THE RULE 11(C)(1)(C) BINDING PLEA AGREEMENT PROPOSED  
BY THE GOVERNMENT AND BOEING**

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## INTRODUCTORY STATEMENT

<sup>1</sup> In addition to Ms. Ryan, the other victims' family members filing this motion are Emily Chelangat Babu and Joshua Mwazo Babu, Catherine Berthet, Huguette Debets, Luca Dieci, Bayihe Demissie, Sri Hartati, Zipporah Kuria, Javier de Luis, Nadia Milleron and Michael Stumo, Chris Moore, Paul Njoroge, Yuke Meiske Pelealu, John Karanja Quindos, Guy Daud Iskandar Zen S., and others similarly situated. Many family members support this motion. On Friday of this week, the families will file with the Court a list of other families who support this motion.



families' attorneys asked the Government whether it would consider the objections that family members had made to the plea before extending the offer to Boeing. The Government responded that it would not take even a few minutes to reflect on the families' concerns. Instead, the purpose of the call was simply to "inform" the victim's families of the agreement's proposed terms. And the Government said that, immediately after the call, it was going to offer the described plea deal to Boeing. The Government also told the family members that the terms were "non-negotiable."

Against this backdrop, the family members have been surprised that, after the Government extended purportedly "non-negotiable" terms to Boeing, it took the parties 24 days to "memorialize" (ECF No. 215 at 1) the agreement. From the families' perspective, it appears that, contrary to what the Government told them, the Government and Boeing have engaged in extensive negotiations about how to resolve this case—negotiations that excluded the families.

The families could argue that the Government's failure to ever specifically discuss the proposed agreement's terms with the victims' families violates their CVRA "reasonable right to confer" with the prosecutors. After all, in 2009, the Fifth Circuit instructed prosecutors that they should develop a "reasonable way" to "ascertain the victims' views on the *possible details* of a plea bargain." *In re Dean*, 527 F.3d 391, 395 (5th Cir. 2008) (emphasis added). And in 2015, Congress codified *Dean's* holding by adding a CVRA right for victims "to be informed in a timely manner of any plea bargain ...." 18 U.S.C. § 3771(a)(9) (emphasis added). As explained in earlier briefing, protecting this right necessarily would involve an opportunity for victims to be informed of and confer about the details of a proposed plea. *See* ECF No. 52 at 23-24. But rather than delay these proceedings further with a procedural issue surrounding the covert negotiations surrounding the plea, the families will simply argue to the Court why it should reject this rotten deal.

## JUDICIAL DISCRETION REGARDING WHETHER TO ACCEPT A PROPOSED PLEA

It has long been settled that “a defendant has no right to be offered a plea, nor a ... right that the judge accept it.” *Missouri v. Frye*, 566 U.S. 134, 148 (2012). The court plays a significant role in evaluating a proposed plea agreement, because the agreement may ultimately determine a defendant’s sentence and sentencing is primarily a judicial responsibility. *See* 5 WAYNE R. LAFAVE ET AL., CRIMINAL PROCEDURE §21.3(e) (4th ed. 2023).

In determining whether to accept a proposed plea agreement, the court possesses broad discretion. *See, e.g., United States v. BP Products North America Inc.*, 610 F. Supp.2d 655, 674 (S.D. Tex. 2009). A district court’s discretion in evaluating a proposed plea agreement is particularly broad when the parties are proposing an agreement under Rule 11(c)(1)(C)—a so-called “binding” plea or “C-plea.” A C-plea “applies in an all-or-nothing fashion. Once the judge accepts a [C-plea], she is compelled to impose the attendant sentence recommendation without tinkering with the details.” *United States v. Orthofix, Inc.*, 956 F. Supp. 2d 316, 331 (D. Mass. 2013). Thus, a judge’s “hands are tied once she accepts a [C-plea] so that she cannot tailor a sentence [to] fits the defendant’s circumstances exactly. The judge ought therefore consider the [C-plea] with no small amount of circumspection, lest her role in dispensing criminal justice amount to no more than that of sentencing-by-number, imposing conditions—as she might apply paint—mechanically from a scheme of the parties’ choosing.” *Id.* at 331-32. Indeed, a district court is duty-bound to carefully review a proposed C-plea in exercising its discretion. *See Freeman v. United States*, 564 U.S. 522, 529 (2011) (“Rule 11(c)(1)(C) permits the defendant and the prosecutor to agree that a specific sentence is appropriate, but that agreement does not discharge the district court’s independent obligation to exercise its discretion.”).

The federal rules specifically authorize district courts to reject proposed plea agreements, including C-pleas. *See* Fed. R. Crim. P. 11(c)(3) (“the court may accept the agreement, *reject it*, or defer a decision until the court has reviewed the presentence report” (emphasis added)). The text of Rule 11(c)(3) does not “define the criteria by which a district court should exercise the discretion the rule confers[] or explain how a district court should determine whether to accept a plea agreement.” *In re Morgan*, 506 F.3d 705, 710 (9th Cir. 2007). “This conspicuous omission ... appears to be intentional, as the drafters stated that the decision to accept or reject a plea agreement should be ‘left to the discretion of the individual trial judge,’ rather than governed by any bright-line test.” *Id.* at 710 n. 2 (quoting Fed. R. Crim. P. 11, Advisory Committee note).

The Fifth Circuit has squarely held that a district court may properly reject a plea agreement if the defendant would receive too light of a sentence or if accepting the plea agreement would undermine the statutory purposes of sentencing or the sentencing guidelines. *See United States v. Smith*, 417 F.3d 483, 487 (5th Cir. 2005), *cert. denied*, 546 U.S. 1025 (2005); *United States v. Crowell*, 60 F.3d 199, 205–06 (5th Cir. 1995); *United States v. Foy*, 28 F.3d 464, 472 (5th Cir. 1994); *United States v. Bean*, 564 F.2d 700, 704 (5th Cir. 1977). The Fifth Circuit has specifically upheld rejections of pleas where the proposed agreement failed to consider a defendant’s “large number of victims.” *See, e.g., Smith*, 417 F.3d at 487 (“[t]he district court did not abuse its discretion in concluding that the plea agreement did not adequately reflect the seriousness of the offense, was unduly lenient, and would not meet the objectives of sentencing given [the defendant’s] ... large number of victims”); *Crowell*, 60 F.3d at 206 (“[g]iven the large number of victims and the protracted course of fraudulent activity, we cannot find that the district court abused its discretion [in rejecting a proposed plea agreement]”).

## REASONS FOR REJECTING THE PROPOSED PLEA

The Court should exercise its discretion to reject the parties’ proposed binding plea because “the agreement is against the public interest in giving the defendant unduly favorable terms.” *United States v. Bean*, 564 F.2d 700, 704 (5th Cir. 1977). Multiple reasons support this conclusion.

**I. The Court Should Reject the Proposed Rule 11(c)(1)(C) Binding Plea Agreement Because It Destroys the Court’s Ability to Craft a Fair and Just Sentence—and One That is Perceived as Fair and Just by the Public.**

The Court is familiar with the terms of the binding plea agreement that the parties have asked it to approve. ECF No. 221-1. If the Court approves the deal, then Boeing will plead guilty to the pending conspiracy charge and pay a fine of \$243,600,000, based on the premise that Boeing’s “gain” from its crime was that amount. Proposed Plea Agreement ¶ 25(a). Boeing will also be required to retain a corporate monitor, who will work on improving the effectiveness of Boeing’s “compliance program and internal controls, record-keeping, policies, and procedures ....” *Id.*, Att. D, at ¶ 3. Boeing will also make an annual “safety and compliance” investment of about \$152,000,000 over the three-year term of supervision. *Id.* at ¶ 25(g). And the agreement rests on a “statement of facts” recycling the earlier, abbreviated facts attached to the DPA. *Id.*, Att. A-2.

Perhaps this deal serves the public interest—although in the sections that follow the families argue strenuously to the contrary. But what cannot be debated is that the parties are attempting to force the Court to swallow the deal whole. In filing a proposed C-plea, the parties are asking this Court to approve a deal that “cabin[s] judicial discretion,” “crowds a judge into a ‘take it or leave it’ position,” and “adds a powerful, near-hydraulic pressure in favor of plea bargaining.” *United States v. Kandirakis*, 441 F.Supp.2d 282, 284 n. 5 (D. Mass. 2006).

Perhaps anticipating such concerns, the Government attempts to reassure the Court that such binding plea deals are its “standard practice in corporate cases.” ECF No. 221 at 1. Assuming

this is true,<sup>2</sup> it would be unsurprising to learn that the Department is making increasing use of such agreements, since they effectively transfer sentencing power from the Judiciary to the Executive. But as the Government is no doubt aware, “[c]ourts throughout the country have rejected ‘C’ pleas [in corporate cases] that do not promote justice.” *United States v. Aegerion Pharmaceuticals, Inc.*, 280 F. Supp. 3d 217, 222 (D. Mass. 2017) (collecting examples); *see also* Joshua Levy & Elizabeth Douglas, *DOJ Corporate Plea Deals Face Increased Judicial Resistance*, Law360 (Jan. 8, 2020) (collecting examples of federal judges rejecting C-pleas in corporate crime cases).<sup>3</sup>

Far from being comforting, the Government’s “standard practice” supports another, more troubling proposition: “[T]hat a forbidden, two-tier system pervades our courts. Corporations routinely get ‘C’ pleas after closed door negotiations with the executive branch while individual offenders are rarely afforded the advantages of a ‘C’ plea. Instead, they plead guilty and face a truly independent judge. This is neither fair nor just; indeed, it mocks our protestations of ‘equal justice under law.’” *Aegerion*, 280 F. Supp. 3d at 224-25.

In *Aegerion*, Judge Young capably dispatched some of the arguments that have been made

<sup>2</sup> While the Government cites three cases where it recently entered into C-pleas with corporations, it is easy to find four, very recent corporate plea deals that are not C-pleas. *See, e.g., United States v. KVK Research, Inc.*, No. 2:24-cr-69-HB, Dkt. 17 (E.D. Pa. Mar. 6, 2024) (Rule 11(c)(1)(B) plea with a corporation); *United States v. GDP Tuning, LLC*, No. 4:23-cr-168-BLW, Dkt. 3 (same); *United States v. Zeaborn Ship Management (Singapore) Pte. Ltd.*, No. 3:23-r-0-1661-JO, Dkt. 22 (S.D. Cal. August 21, 2023) (same); *United States v. FeelGood Natural Health Stores, Ltd.*, No. 2:23-cr-20189, Dkt. 11 (E.D. Mich. June 5, 2023) (same).

<sup>3</sup> See, e.g., *United States v. Aegerion Pharmaceuticals, Inc.*, 280 F. Supp.3d 217 (D. Mass. 2017) (rejecting corporate C-plea because it was not in the public interest); *United States v. Holy Stone Holdings Co.*, No. 16-cr-366-JD (N.D. Cal. Aug 9, 2017), ECF No. 21 (same); *United States v. Elna Co.*, No. 16-cr-00365-JD (N.D. Cal. Jun 14, 2017), ECF No. 23 (same); *United States v. Matsuo Elec. Co.*, No. 17-cr-00073-JD (N.D. Cal. May 24, 2017), ECF No. 21 (same); *United States v. Orthofix, Inc.*, 956 F. Supp. 2d 316 (D. Mass. 2013) (rejecting a corporate C-plea because it “hamstrings [the court] in the performance of its sentencing function”); *United States v. Guidant LLC*, 708 F. Supp. 2d 903 (D. Minn. 2010) (rejecting corporate C-plea because it did not adequately address the defendant’s criminal history and conduct).



justifying corporate C-pleas. For example, it is sometimes argued that corporations require C-pleas because any other vehicle—even a Rule 11(c)(1)(B) plea agreement affording the Court slightly more discretion—would create too much uncertainty for innocent employees, shareholders, investors, and other interested parties. The pharmaceutical company in *Aegerion* advanced this argument, prompting Judge Young to respond: “Say what? ... Does Aegerion think district judges simply are not competent to sentence corporate criminals? Or is it that the interests of drug dealers’ innocent wives, children, neighbors, and colleagues are somehow less important than those of a corporation’s shareholders and investment bankers?” *Aegerion*, 280 F. Supp. 3d at 223.

Because of issues such as these, it may well be the case that judges should always reject C-pleas because they create a “forbidden, two-tier system of justice.” *Cf. United States v. Robertson*, 45 F.3d 1423, 1439 (10th Cir. 1995) (holding it is judicially sound for a judge to reject all C-pleas if the judge concludes that they categorically interfere with judicial sentencing authority). But this Court need not reach such far-reaching conclusions to reject the specific C-plea in front of it. If there was ever a C-plea that should be rejected, this is the one.

As this Court has accurately noted, this case may “properly be considered the deadliest corporate crime in U.S. history.” ECF No. 185 at 25. And yet, rather than being pursued vigorously, the prosecution here has appeared to give Boeing extraordinarily generous treatment ... and to ignore the victims and their families.

First, the Government falsely denied to the families that it was criminally investigating Boeing (ECF No. 52 at 8-10)—false statements that the Government has never explained.<sup>4</sup>

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<sup>4</sup> For several years, the victims’ families have asked the Justice Department to explain why it made these false statements, ironically through the Department’s Victims’ Rights Ombudsperson. But after first agreeing to arrange a meeting between the Ombudsperson and the victims’ families, the Department recently backtracked, claiming that the Ombudsperson had

Next, the Department allowed Boeing to negotiate behind closed doors a generous deferred prosecution deal—and to do so in violation of the CVRA by concealing the agreement from the victims’ families. *See* ECF No. 116 at 18 (finding that the Government violated the CVRA by failing to confer with the families before reaching its DPA).

Then, when the families challenged the secret deal, the Department (and Boeing) jointly took the position that the only “victims” deceived by Boeing’s lies were FAA bureaucrats. *See* ECF No. 58 at 9-14 (Gov’t position); Hrng. Tr. (Aug. 26, 2022) at 242-43 (Boeing position). The Court rejected these positions. ECF No. 116 at 18; *see also* ECF No. 90 at 1 (amicus brief of Senator Cruz describing the positions as “nonsensical”).

Later, before the Fifth Circuit, both the Department and Boeing argued that this Court was powerless to remedy a proven CVRA violation. The Fifth Circuit disagreed. *See In re Ryan*, 88 F.4th 614, 623 (5th Cir. 2023).

And finally, and perhaps most significant, despite having been given a generous deal, Boeing proceeded to spend the last three years breaching that agreement by failing to implement appropriate corporate compliance measures. *See* ECF 221-1, at A-1 (outlining details of Boeing’s breach).

Given this strong suspicion of preferential treatment for Boeing, approving the C-plea here would be particularly inappropriate. Approving the binding plea would “unduly hobble[] [the] Court[]” in performing its “sworn constitutional duty to ‘do equal right to the poor and to the rich.’” 28 U.S.C. § 453.” *Aegerion*, 280 F. Supp. 3d at 228. Disposing of this case through a C-plea would provide enormous advantages to Boeing, including the private negotiations with the Government

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“determined such a meeting would not be compatible with the scope of her authority, which is narrowly defined.” Ltr. from Glenn Leon to Paul Cassell at 3 (June 11, 2024).

described above, all designed to achieve effective damage control and produce “no surprises from the judiciary.” *Id.* at 226. However, it is difficult to fathom why the Government has turned to a C-plea to resolve this particular case, involving 346 deaths. One federal judge noted that “[i]n my experience, individuals are afforded ‘C’ pleas only when the government’s case is weak and it is trying to lock in the plea ....” *Id.* at 226. Of course, such a concern is inapplicable here. It would be nearly impossible for the Government to have a stronger case against Boeing, given Boeing’s *signed confession* to the conspiracy charge in the Deferred Prosecution Agreement. *See* DPA, ¶ 2.

To be clear, the families’ objection to a C-plea does not hinge on anything being wrong with the deal’s terms (although there is plenty wrong, as discussed below). Rather, the families’ concern is that the deal reeks of having been cooked up collusively by prosecutors and defense attorneys, who have worked together against the families on many aspects of the case. *See, e.g.*, Aron Solomon, *Boeing’s Path Out of its 737 Controversy Is Going to be Bumpy*, THE HILL (July 13, 2024) (“I think it’s a very fair characterization [to call the Boeing plea deal a ‘sweetheart deal’]” as “the deal is excessively lenient and fails to hold Boeing adequately accountable for its role in the deaths of [the families’] loved ones.”).<sup>5</sup> Whether or not this suspicion is well-founded, the only way to assure public confidence in the outcome here is for the Court—not the parties—to determine the appropriate sentence. Judge Young put this point nicely in rejecting a corporate C-plea, explaining that “[w]ere this Court to have a free hand, I might well sentence [the company] to virtually the same sentence as the parties here urge on the Court ... or I might not. I simply do not know because, as yet, the parties have deprived me of that responsibility ....” *Aegerion*, 280 F.

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<sup>5</sup> Recently various groups asked Deputy Attorney General Lisa Monaco to recuse herself from Boeing plea deal deliberations, due to a perceived conflict of interest. <http://www.economicliberties.us/wp-content/uploads/2024/07/DOJ-Boeing-Letter-7.2.24.docx.pdf>. DAG Monaco has declined to do so.

Supp. 3d at 228. This Court should likewise reject this proposed plea, without considering its merits, because the agreement would prevent the Court from exercising its discretion.

If this Court rejects the proposed C-plea, a possible next step might be for the parties to work toward turning it into a Rule 11(c)(1)(B) plea. Under such a plea, the Court is permitted to “accept the guilty plea without necessarily imposing the recommendation proffered by the parties.” *Orthofix*, 956 F. Supp. 2d at 332. But whatever might follow from the Court’s rejection of the current proposed plea agreement is not an appropriate concern at this juncture. Of course, the Court must leave plea bargaining up to the parties, *see* Fed. R. Crim. P. 11(c)(1), a process that should be informed by the victims’ families views, 18 U.S.C. § 3771(a)(5). The important point is that if the Court rejects this binding C-plea, whatever may follow will enhance public confidence that the Court itself is performing its judicial duty and determining the appropriate sentence on its own.

## **II. The Court Should Reject the Proposed Plea Because the Parties Have “Swallowed the Gun” By Hiding Relevant Facts About Boeing’s Culpability.**

Turning from procedural issues to the substance of the proposed plea agreement, the Court has multiple reasons to reject it. First and foremost is the incomplete and misleading statement of facts that the parties ask the Court to rely on. Because the parties’ proffered facts are deceptively incomplete, the Court should reject the plea until all relevant facts surrounding Boeing’s culpability are disclosed.

In evaluating the plea agreement, the Court must consider whether accepting the agreement “will undermine the statutory purposes of sentencing or the sentencing guidelines.” *United States v. Smith*, 417 F.3d 483, 487 (5th Cir. 2005). In making such a determination, the Court will necessarily and immediately confront the need to consider “the nature and circumstances of the offense,” 18 U.S.C. § 3553(a)(1)— that is, the facts of the case.

It has long been Justice Department policy that “[w]hen advocating at sentencing, prosecutors must fully and accurately alert the court *to all known relevant facts* ... and explain why the interests of justice warrant their sentencing recommendations.” Memo. for all Federal Prosecutors, General Department Policies Regarding Charging, Pleas, and Sentencing at 5 (Dec. 16, 2022) (emphasis added).<sup>6</sup> In more colorful words, prosecutors should not “swallow the gun”—i.e., withhold incriminating evidence at sentencing. *See, e.g., United States v. Mercer*, 472 F. Supp. 2d 1319, 1323 (D. Utah 2007) (noting that Department policy at sentencing is designed to avoid “the spectacle of government attorneys arguing to the court things that are contrary to fact—it avoids prosecutors swallowing the gun.”). Thus, parties may not stipulate to misleading facts. U.S.S.G. § 6B1.4(a)(2) (policy statement). Instead, they must “fully and accurately disclose all factors relevant to the determination of sentence.” U.S.S.G § 6B1.4, Commentary (policy statement). Under the Guidelines, parties are not permitted to “cloak the facts to reach a result contrary to the Guidelines’ mandate.” *United States v. Scroggins*, 880 F.2d 1204, 1214 (11th Cir. 1989).

Sadly, here the parties have “swallowed the gun” by concealing the full scope of Boeing’s culpable conduct. Understanding that this is a strong allegation, it is possible to prove this point concretely with many examples. Attached to this brief is the families’ proposed statement of facts on which the Court should base sentencing. Ex. 1 (“Families’ Statement of Facts”). The Court will find in the families’ document many highly relevant facts that the parties have omitted.

A straightforward illustration of omitted facts comes from sealed documents contained in civil litigation against Boeing. Through civil discovery, civil litigators representing the families

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<sup>6</sup> Available at [https://www.justice.gov/d9/2022-12/attorney\\_general\\_memorandum\\_-\\_additional\\_department\\_policies\\_regarding\\_charges\\_pleas\\_and\\_sentencing\\_in\\_drug\\_cases.pdf](https://www.justice.gov/d9/2022-12/attorney_general_memorandum_-_additional_department_policies_regarding_charges_pleas_and_sentencing_in_drug_cases.pdf)

have obtained documents from Boeing showing very culpable behavior by the company. While Boeing has succeeded in keeping these documents under wraps through an expansive “protective order” in the civil litigation, undersigned counsel recently received permission to view some of the documents and to provide them to this Court. *See In re: Ethiopian Airlines Flight 302*, No. 1:19-cv-02170, Dkt. 2162 (N.D. Ill. June 25, 2024).<sup>7</sup> The documents contain shocking revelations about the lengths to which Boeing went to conceal the MCAS safety issue from the FAA and, indeed, anyone else—acts of deception in furtherance of Boeing’s conspiracy which the parties have not fully disclosed.

One example is Boeing’s deceitful correspondence with Ethiopian Airlines regarding the MCAS safety problem. On November 28, 2018, Ethiopian Airlines’ Head of Flight Operations emailed three questions to Boeing’s Chief 737 Pilot, Jim Webb. Webb and Boeing Vice President of Engineering Mike Murphy claimed that Annex 13 to the Convention on International Civil Aviation, which prescribes how to handle international aviation incident investigations, prevented them from answering. Murphy was not an Annex 13 expert, but he made that determination anyway. He also knew Annex 13 allowed a party to the investigation to get permission from the lead investigating authority (in this instance, Indonesia’s KNKT) to disclose information that affects aviation safety. Boeing’s senior air safety investigator Simon Lie, who was well-versed with investigations conducted pursuant to Annex 13 and was also aware of this safety-related exception to the nondisclosure rule, disagreed with his colleagues and proposed a substantive response. Boeing’s product liability attorney Allison Kendrick was copied on these emails.

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<sup>7</sup> Because undersigned counsel was also placed under a protective order, the families’ description of the materials is redacted in the families’ public court filing and provided to the Court separately under seal. Counsel has also previously provided this information to the Justice Department.

On December 2, 2018, Webb responded to the Ethiopian Airlines pilot and declined to answer two out of his three questions, against Lie’s advice.

When MCAS deployed on flight ET 302, the pilots tried to follow the Boeing procedure outlined in the emergency AD. They managed to disable MCAS, but the plane was still uncontrollable; in trying to deal with the crisis, they restarted MCAS, which doomed the plane.

If Boeing had considered and responded to the first two questions raised by Ethiopian Airlines instead of refusing to answer them, the AD would have been clarified, likely preventing the crash of flight ET 302 on March 10, 2019—and saving more than one hundred lives.

Another example of acts in furtherance of Boeing’s criminal conspiracy directly involves CEO Muilenburg. In November 2018, pilots continued to tell the media they were not trained to deal with MCAS. Instead of addressing pilot concerns about the safe operation of the aircraft, Boeing went on the “offensive,” as instructed by Muilenburg. On November 27, 2018, Muilenburg authorized Chief Communications Officer Anne Toulouse to plant “industry source” quotes in the media specifically to counterattack the statements from pilots. The Chief Financial Officer, Chief Executive Officer of Boeing Commercial Airplanes, General Counsel, and Vice President of Product Development were all copied to the exchange about how to blunt adverse coverage by the *Wall Street Journal* and *New York Times*.

The email is clear proof that Muilenburg was committing overt acts in furtherance of the conspiracy to deceive the FAA. Of course, if reporting in the *Wall Street Journal* and *New York Times* could not be derailed, then that might lead to the FAA discovering what was going on. Other

examples are found in the Families' Statement of Facts, Ex. 1 at ¶¶ 52l-52n, 52t-52v, 52y-52ar, 52ax-52ay, 57-61.<sup>8</sup>

In addition to these omitted facts, additional facts about Boeing’s crime have surfaced in recent years—new facts the parties have failed to include in their statement of facts. In proposing the plea, the parties have simply dusted off their old statement of facts from the DPA, attaching to the new plea agreement the same 54 paragraphs that they drafted back in January 2021. *Compare* DPA, Att. A (statement of facts) ¶¶ 1-54 *with* Proposed Plea Agreement, Att. A-2 (statement of facts) ¶¶ 1-54.<sup>9</sup> But on September 22, 2022, the Securities and Exchange Commission (SEC) released an agreed “cease-and-desist” order regarding Boeing’s false statements to investors and the public regarding the safety of the Boeing 737 MAX in the wake of the Lion Air crash. *See In the Matter of The Boeing Company*, File No. 3-21140 (Sept. 22, 2022) (“SEC Findings”).<sup>10</sup> Compared to the parties’ statement of facts attached to the proposed plea agreement—which contains just four paragraphs concerning Boeing’s conspiracy during the five months between the Lion Air crash and the ET 302 crash (¶¶ 49-52)—the SEC developed thirty-one paragraphs (¶¶ 32-63). The SEC’s paragraphs detail ways in which The Boeing Company—and, in particular, its CEO, Dennis A Muilenburg—concealed what Boeing knew about the problem of improper MCAS activations. As the SEC findings explain, on “about November 15, 2018, senior executives at Boeing, including Muilenburg, were informed that the [Safety Review Board] had identified the crew workload issue associated with unintended MCAS activation due to erroneous [angle of

<sup>8</sup> The sealed documents connected with the redacted part of this brief are available as described in the families proposed statement of facts.

<sup>9</sup> The statement of facts associated with the guilty plea adds one new paragraph (paragraph 55) concerning Boeing's "gain" from the offense, discussed below in Part V.B, *infra*.

<sup>10</sup> Available at <https://www.sec.gov/files/litigation/admin/2022/33-11105.pdf>. A similar cease-and-desist order exists for CEO Dennis Muilenburg.



attack] data as an ‘airplane safety issue’ that required remediation[] and that Boeing engineers were working on redesigning the MCAS software to address the issue.” SEC Findings at ¶ 39. Thereafter, Boeing and Muilenburg issued misleading press statements, concealing this known safety issue from the general public. *Id.* ¶¶ 47-51. And Boeing also provided those misleading statements to the FAA. *Id.* ¶ 51. This concealment involved acts in furtherance of the criminal conspiracy charged against Boeing, *see* ECF No. 1 (alleging conspiracy to defraud the FAA), because the acts were designed to keep the public—and the FAA—from learning the truth.

In addition, other public record materials exist providing a more fulsome description of Boeing’s crime than the parties have admitted in their statement of facts. The Court will recall that during the August 2022 hearings regarding “victim” status in this case, the families introduced into evidence the House Committee on Transportation and Infrastructure: Final Committee Report: The Design, Development & Certification of the Boeing 737 MAX (Sept. 2020) (“House Transportation Comm. Rep.”).<sup>11</sup> The Report is 238 pages long and contains significant information relevant to Boeing’s culpability. As one illustration:

Boeing had internal test data revealing that its own test pilot tried—but failed—to respond in time to an uncommanded MCAS activation event in a flight simulator which would have resulted in the loss of the aircraft in a real world situation. This was not simply a hypothetical scenario. It was the result of a flight simulator test by a trained Boeing test pilot. From everything the Committee has learned in its investigation, there is no evidence we have found that shows Boeing shared the results of that test with the FAA or its 737 MAX customers.

*Id.* at 207. This concealment of Boeing’s internal test data is a clear and chilling example of an act in furtherance of the conspiracy to defraud the FAA—and yet it is not revealed by the parties. And on top of that, the parties have even failed to include in their statement of facts this Court’s earlier

<sup>11</sup> Available at <https://democrats-transportation.house.gov/download/20200915-final-737-max-report-for-public-release>.

ruling that Boeing’s conspiracy crime “directly and proximately” caused the crashes of the two planes, killing hundreds. *See* ECF No. 116 at 15-19.

Given the limited space in this brief, the families will not attempt to recount all the facts that are missing from the statement of facts. *Cf.* Families Statement of Facts, Ex. 1 (reciting some of the parties’ omitted facts). That is not the job of the families<sup>12</sup>—the Government is supposed to ensure that the Court has all relevant information. Because the Government (and Boeing) have failed to provide all the relevant underlying facts, the Court should reject the proposed plea.

### **III. The Court Should Reject the Proposed Plea Because It Allows Boeing to Escape Accountability for Directly and Proximately Causing 346 Deaths.**

The parties concede that, under *United States v. Booker*, 543 U.S. 220 (2005), the Court must first “determine an advisory Sentencing Guideline range” and then determine a “reasonable” sentence for Boeing in light of that range. Proposed Plea Agreement ¶ 23. The parties even calculate a Guidelines range. *See id.* ¶ 24. But the parties’ Guideline calculations assume an ordinary corporate crime—that is, one within the heartland of the sentencing guidelines for fraud. But instead, Boeing’s lethal conspiracy crime is an obvious outlier, in which the fraud guideline fails to consider an aggravating circumstance. *See* U.S.S.G. § 5K2.0 (policy statement).

As the Court has found, “Boeing’s crime may properly be considered the deadliest corporate crime in U.S. history.” ECF No. 185 at 25 (recounting earlier finding, ECF No. 116 at 16, that Boeing “directly and proximately” killed 346 people by lying to the FAA). But the parties present to the Court a Guidelines calculation that evades this stark truth.

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<sup>12</sup> And the Government has *opposed* efforts by the family members to obtain all relevant facts surrounding Boeing’s crime. *See, e.g.*, ECF No. 73 (government opposition to families’ motion for disclosure of relevant information). The Government has also successfully resisted the families’ FOIA requests for more than two years, having yet to produce even a single document. *See Ryan v. Dept. of Justice*, No. 23-3815-BAH, Dkt. 15 (D.D.C. June 21, 2024).

First and most jarringly, the parties have failed to add to their Guidelines calculation a specific offense characteristic for Boeing's crime being one "involv[ing] 10 or more victims." U.S.S.G. § 2B1.1(b)(2)(A)(i). The parties thus ignore 346 victims, whom Boeing killed through its conspiracy. For the Court to accept the proposed plea on the premise that the only victim was the FAA would obviously "undermine the statutory purposes of sentencing or the sentencing guidelines." *Smith*, 417 F.3d at 487 (5th Cir. 2005).

Second, the fact that Boeing’s crime directly and proximately killed 346 people means that the Court should depart upward from the Guidelines—something that the parties’ Guidelines calculations fail to acknowledge. The Guidelines provide that “[i]f the offense resulted in death ... or involved a foreseeable risk of death or bodily injury, an upward departure may be warranted.” U.S.S.G. § 8C4.2 (risk of death) (policy statement). The parties do not admit the obvious applicability of this departure provision.

The Government and Boeing may contend that issues relating to multiple victims and a possible upward departure are unimportant because their proposed plea already “reflects a fine at the top of the applicable Sentencing Guidelines fine range ....” Proposed Plea Agreement ¶ 25. But even if this were true (*cf.* Part V, *infra*, demonstrating errors in the parties’ Guidelines fine calculation), it is still important for “truth in sentencing” that the Court accurately calculate the recommended Guidelines sentence. The parties appear to concede as much, claiming that their calculations rest on “a faithful application of the Sentencing Guidelines.” Proposed Plea Agreement ¶ 24. But it is obviously “unfaithful” to the Guidelines to ignore the multiple victim provision and the upward departure provision regarding the deaths.

Moreover, if an upward departure is appropriate from the otherwise applicable fine range—as the 346 deaths plainly indicate—then the Guidelines fine is no longer at “the maximum.” In

addition, the parties are recommending that Boeing receive a credit of \$243 million for payments it previously paid under the DPA. Proposed Plea Agreement ¶ 6(g). If an upward departure from the Guidelines for the deaths suggests a fine of more than \$486 million, then the idea that Boeing should be receiving an offset for its earlier payment is called into doubt.

But last and most important, the Guidelines calculation that the parties are presenting rests on a falsehood: That the Court can sentence Boeing without even considering the 346 victims Boeing killed. The parties' Guidelines calculation is not only inaccurate—it is morally reprehensible. The Court should reject the plea agreement for this reason alone.

#### **IV. The Court Should Reject the Proposed Plea Because It Surreptitiously Exonerates Boeing's Then-Senior Leadership.**

The Court should also reject the proposed plea agreement because it contains, buried within its Guidelines calculation, a provision effectively exonerating Boeing's then-senior leadership from criminal culpability. The parties have declined to discuss the full role of Boeing's then-leadership in their statement of facts. Without a full accounting of what the leadership did, exonerating them is inappropriate.

Back in 2021, Boeing's DPA included a statement directly exonerating senior management of any criminal wrongdoing. Specifically, the agreement said Boeing's "misconduct was neither pervasive across the organization, nor undertaken by a large number of employees, *nor facilitated by senior management.*" ECF No. 4 at 6 (emphasis added). After years of litigation, the Government has never provided an explanation for such a sweeping statement, which effectively gave a get-out-of-jail-free card to Boeing's then-leadership. *See* ECF No. 65 at 2-5 (explaining why this exonerating provision was extraordinary and inappropriate).

Obtaining a criminal prosecution of Boeing's responsible leaders remains a top priority for the families. And in recent conferral meetings, the Government has told the families that it is

continuing to investigate whether top executives at Boeing were involved in the conspiracy. Indeed, during the Sunday meeting on June 30, 2024, when the Government informed the families about the plea terms, the Government indicated that it had excluded the DPA's exonerating language ("no[t] facilitated by senior management") from the plea agreement while the Department's investigation into senior management continued.

But then, when the Government revealed the language of its proposed plea agreement last week, the families were surprised to see buried deep within it in a sentencing guideline calculation that assumed that not even a single senior executive was involved during Boeing's long-running conspiracy. In the Guidelines calculation accompanying the plea deal (§ 24), the parties compute a proposed "culpability score" under the Guidelines. *See* U.S.S.G. § 8C2.5(a). That culpability score is based, in large part, on the level of culpable corporate employees. If only "substantial authority personnel" (i.e., mid-level executives) were involved in a defendant's crime,<sup>13</sup> then only a two-level increase in the culpability score is appropriate. U.S.S.G. § 8C2.5(b)(4). But if "high-level personnel" (i.e., a senior executive or member of leadership) were involved, then a more substantial five-level increase is appropriate. U.S.S.G. § 8C2.5(b)(1).

In their Guidelines calculation, the parties have inserted the mid-level executive enhancement (two levels) rather than the senior-executive enhancement (five levels). *See* Proposed Plea Agreement § 24(d). This means the parties are stipulating that not even a single Boeing senior executive was involved in the conspiracy.

This Court should not ignore the truth: senior executives at Boeing well above the mid-level executives who have been named (i.e., Forkner and a co-conspirator test pilot) were culpable

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<sup>13</sup> Under the Guidelines, "substantial authority personnel" are defined to mean individuals who "within the scope of their authority exercise a substantial measure of discretion in acting on behalf of an organization."—e.g., a plant manager or a sales manager. U.S.S.G. § 8A1.2, cmt. 3.

in the conspiracy. These culpable individuals include members of Boeing's most senior management, including Boeing's CEO Dennis A. Muilenburg and others. *See generally* Ex. 1, Families' Statement of Facts. At the very least, before signing off on a C-plea resting on the stipulated factual conclusion that senior executives were uninvolved, the Court should require the Government to marshal the relevant facts and present its evidence about Boeing's C-suite involvement. The families respectfully submit that when the Government discloses this evidence, it will show that the appropriate Sentencing Guideline calculation requires a five-level enhancement reflecting the participation in the conspiracy of at least one of Boeing's senior leaders. Indeed, for a Guidelines enhancement to be applicable, it is only necessary that a senior leader "condoned" the offense or was "willfully ignorant" of the offense. U.S.S.G. § 8A1.2, Application Note 3. There is clear evidence to this effect, as the families recount in their statement of facts. Ex. 1, ¶ 66.

**V. The Court Should Reject the Proposed Plea Because the \$243 Million Fine Is Inadequate Under the Principles of Sentencing.**

The Court should also reject the plea because the parties' proposed fine of \$487,200,000 is inadequate—or, at the very least, rests on misleading accounting and inaccurate accounting. Here again, the Court should not sign onto the parties' deceptive stipulation.

**A. The Parties Deceptively Assume that the "Loss" from Boeing's Crime was Zero When in Fact It was Billions of Dollars.**

The standard fine for an organization like Boeing is up to \$500,000. *See* 18 U.S.C. § 3571(c). But the "alternative fines" provision immediately comes into play in cases like this one, allowing a fine based on twice the "gross gain" or twice the "gross loss" from a defendant's crime. 18 U.S.C. § 3571(d).

Under the Sentencing Guidelines, this Court must look first to the "loss" caused by an offense in determining the fine. Indeed, the Guidelines instruct that "[t]he court shall use the gain

that resulted from the offense as an alternative measure of loss *only if* there is a loss but it reasonably cannot be determined.” U.S.S.G. § 2B1.1, App. Note 3(B) (emphasis added); *see also* U.S.S.G. § 8C2.4(a) (indicating a corporate fine must be based on the greater gain or loss from the offense, to the extent that the loss was caused at least recklessly). Moreover, the sentencing court is not required to calculate the loss with specificity; rather “[t]he court need only make a reasonable estimate of the loss, given the information available.” *United States v. Masek*, 588 F.3d 1283, 1287 (10th Cir. 2009). *Accord* U.S.S.G. § 2B1.1, App. Note 3(B) (citing 18 U.S.C. § 3742(e) and (f)).

Perhaps the most remarkable thing about the parties’ proposed fine calculation is that it fails to reflect that Boeing’s crime killed 346 innocent victims. This staggering loss should be reflected in the sentence in this case—including in the fine. To do anything else would misleadingly suggest that Boeing committed a “victimless” crime.

The families have repeatedly asked the Government for its “loss” calculation in this case. And repeatedly, the Government has declined to provide one, raising the families’ suspicion that the Government (joined by Boeing) is effectively taking the position that the loss is zero.

Sentencing Boeing on the premise that its crime caused zero loss is offensive—and this Court should not lend its imprimatur to such an absurd position. As this Court previously found after two days of evidentiary hearings, the truth is that a “tragic *loss of life*” foreseeably resulted from Boeing’s conspiracy to defraud the United States. ECF No. 116 at 17 (emphasis added). Indeed, in the very first sentence of its very first filing on these issues, the Department essentially conceded as much. *See* ECF No. 58 at 1 (“The United States of America ... recognizes the *indescribable and irreparable losses* suffered by the representatives of eighteen crash victims of Lion Air Flight 610 and Ethiopian Airlines Flight 302 ... and the *losses* suffered more generally by the loved ones of the 346 people who perished on those flights” (emphases added)).

Boeing has similarly conceded that it caused losses to the family members ... at least when doing so served its public relations purposes. During a June 18, 2024, Senate hearing on “Boeing’s Broken Safety Culture,” Boeing’s current CEO, Dave Calhoun, turned to face the victims’ families and told them: “I would like to apologize on behalf of all of our Boeing associates spread throughout the world, past, and present, *for your losses*. They are gut-wrenching. And I apologize for the grief that we have caused .... And so, again, I’m sorry.”<sup>14</sup>

Candidly, the families are skeptical of Mr. Calhoun’s apparent contriteness while the cameras were running. But if he is sincere, then the losses Boeing caused by killing 346 passengers and crew should not be ignored in the sentencing in this case—which is what the parties’ proposed “binding” plea agreement would require the Court to do.<sup>15</sup> Instead, the Court should acknowledge those losses by basing its sentence on a reasonable estimate of the size of these losses.

Multiple approaches are possible for quantifying the “gut-wrenching” losses from Boeing’s crime. *See generally* Paul G. Cassell & Richard Fowles, *Does Bail Reform Increase Crime? An Empirical Assessment of the Public Safety Implications of Bail Reform in Cook County, Illinois*, 55 WAKE FOREST L. REV. 933, 973 (2020) (collecting research on losses from homicide-related crimes). For example, in a prominent 2010 article, Professor Matt DeLisi and his colleagues calculated “cost estimates” for the crime of murder (the most intentional form of a crime causing death). *See* Matt DeLisi et al., *Murder by Numbers: Monetary Costs Imposed by a Sample of Homicide Offenders*, 21 J. FORENSIC PSYCHIATRY & PSYCH. 501, 506 (2010). They concluded that

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<sup>14</sup> While a transcript of the hearing appears to be unavailable, a video recording of the hearing is available on the Senate Permanent Subcommittee on Investigations website at: <https://www.hsgac.senate.gov/subcommittees/investigations/hearings/boeings-broken-safety-culture-ceo-dave-calhoun-testifies/>.

<sup>15</sup> The parties apparently envision that, after the sentencing, there would be separate proceedings ninety days later to determine potential restitution. But whether any restitution would be ordered remains uncertain under the parties’ proposal. *See* Part VIII, *infra*.



the cost, in 2008 U.S. dollars, was \$4,712,769. *Id.* at 506 tbl. 1. Translated into 2018 dollars, the cost of a homicide would be \$5,496,483. The same “cost estimate” for a death caused by an intentional murder would, by definition, be the same as the cost estimate for a death caused by Boeing’s intentional conspiracy to defraud the FAA. Multiplied across 346 crime victims, the total loss to victims from Boeing’s crime (in 2018 dollars) is \$1,901,783,118.<sup>16</sup>

To be sure, there are other ways the Court could calculate a reasonable “loss” figure for the deaths of 346 persons, which could produce even larger figures.<sup>17</sup> And the families here use a conservative approach, limiting the “gross loss” to just *pecuniary* losses.<sup>18</sup> But the Court need not,

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<sup>16</sup> 346 deaths x \$5,496,483 loss/death = \$1,901,783,118.

<sup>17</sup> One alternative calculation would use the U.S. Department of Transportation’s Value of a Statistical Life (VSL) methodology. The VSL measure is a conventional approach for calculating the benefit of preventing a fatality. In 2013, the Transportation Department issued a comprehensive memorandum on the subject and thereafter updated its VSL figures annually. *See* U.S. Dept. of Transportation, Guidance on Treatment of the Economic Value of a Statistical Life (VSL) in U.S. Department of Transportation Analyses (Feb. 28, 2013) (hereinafter “Transportation Dept. VSL Memo.”) (available at [https://www.transportation.gov/sites/dot.gov/files/docs/VSL%20Guidance\\_2013.pdf](https://www.transportation.gov/sites/dot.gov/files/docs/VSL%20Guidance_2013.pdf)). Notably, the Federal Aviation Administration (FAA) has implemented the Transportation Department’s approach. *See* FAA, Treatment of the Values of Life and Injury in Economic Analysis (n.d.) (available at [https://www.faa.gov/sites/aa.gov/files/regulations\\_policies/policy\\_guidance/benefit\\_cost/econ-value-section-2-tx-values.pdf](https://www.faa.gov/sites/aa.gov/files/regulations_policies/policy_guidance/benefit_cost/econ-value-section-2-tx-values.pdf)).

VSL is simply an improved and expanded measure of a victim’s “expected earnings”—clearly a pecuniary loss. Because VSL more fully captures all of the “value of reduced risk,” in a case (like this one) where the risk has actually materialized, it is best viewed as comparable to a calculation of lost expected earnings. A standard VSL calculation produces a reasonable estimate of the loss to the victims and their families caused by Boeing’s crime of \$10.5 million per life (in 2018 dollars) x 346 lives lost = \$12,390,000,000. *See* <https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-on-valuation-of-a-statistical-life-in-economic-analysis>. After doubling, the VSL method results in a maximum possible fine of \$24,780,000,000.

<sup>18</sup> The alternative fine provision’s plain language does not limit the relevant losses to “pecuniary” losses. The alternative fine provision has two parts—a “trigger mechanism” and a “penalty calculator.” Broken into those two parts, the statute reads: “If any person derives pecuniary gain from the offense, or if the offense results in *pecuniary loss* to a person other than the defendant,” (trigger mechanism) “... the defendant may be fined not more than the greater of twice the gross gain or twice the *gross loss*, unless imposition of a fine under this subsection would

at this juncture, firmly decide these methodological issues. To reject the proposed plea, the Court need only conclude that the parties' failure to offer the Court *any* loss figure for the families' losses renders their proposed plea unacceptable.

In addition to failing to consider the losses to the families, the parties have failed to consider other losses as well. To the loss figure for the deaths must be added other losses Boeing caused. Just as Boeing's lies to the FAA directly and proximately caused the two planes to crash, the lies also directly and proximately caused the grounding of Boeing's 737 MAXs in the U.S. and around the world. Indeed, in the DPA, the Government and Boeing appeared to acknowledge that fact. The DPA required Boeing to pay an "Airline Compensation Amount" of \$1,770,000,000 to Boeing's "airline customers for the direct pecuniary harm that its airline customers incurred as a result of the grounding of the Company's 737 MAX." DPA ¶ 12.

In order for an event such as a grounding to be "proximately" caused by a crime, it is only necessary that the connection not be "so attenuated that the consequence is more aptly described as mere fortuity." ECF No. 116 at 16 (citing *Paroline v. United States*, 572 U.S. 434, 445 (2014)).

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unduly complicate or prolong the sentencing process" (penalty calculator). 18 U.S.C. §3571(d) (emphases added). Restricting the "gross loss" provision to "gross pecuniary losses" is inconsistent with the statute's plain language.

While one district court has disagreed with the interpretation advanced above, *see United States v. BP Products North America, Inc.*, 610 F.Supp.2d 655, 682 (S.D. Tex. 2009) (concluding that alternative fines provision is limited to pecuniary losses), the families' position is consistent with the "cardinal principle" of statutory interpretation that courts "must give effect, if possible, to every clause and word of a statute." *Loughrin v. United States*, 573 U.S. 351, 358 (2014). Indeed, the Supreme Court has "often noted that when Congress includes particular language in one section of a statute but omits it in another—let alone in the very next provision—this Court presumes that Congress intended a difference in meaning. *Id.* at 23 (cleaned up)). Here, of course, Congress omitted the word "pecuniary" in the very next part of the same provision—indicating Congress intended a different meaning between "pecuniary loss" and "gross loss."

Because the alternative fines provision for "gross loss" encompasses non-pecuniary losses such as pain and suffering, the families' pecuniary loss figures recounted above are substantially more conservative than required by the statute. For the full, statutory "gross loss" calculation, the Court should include both pecuniary and non-pecuniary losses.

In encompassing losses that directly followed from Boeing's crime, the DPA was not describing a mere fortuity. Once planes began falling from the sky, it was obvious that domestic and foreign regulators would step in to protect the flying public.

The circumstances surrounding the domestic (and foreign) grounding of Boeing's 737 MAXs around the world are discussed in the House Transportation Committee Report. *See* House Transportation Comm. Rep., *supra*, at 219-21. As recounted there, on March 13, 2019 (three days after the ET 302 crash), the FAA held an "urgent" call with Boeing. According to Ali Bahrami, the FAA's head of safety, Boeing shared information showing that the traces from the Lion Air crash and the Ethiopian Airlines crash showed striking similarities. *Id.* at 220. Immediately after that meeting, Mr. Bahrami walked to the FAA Administrator's Office and said: "We need to ground the fleet." *Id.* at 221. Both domestic and foreign grounding orders swiftly followed.

Clearly, the grounding orders were proximately caused by Boeing's crime. And so, just as the DPA recognized that compensation was required for losses to Boeing's aircraft customers, an appropriate "loss" calculation must also take these immediate consequences into account. The DPA figure for airline customer compensation was \$1,770,000,000, which Boeing cannot dispute. But additional incontrovertible documents are available from Boeing (its Form 10-K), showing total losses to Boeing's customers of at least \$9,257,000,000.<sup>19</sup>

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<sup>19</sup> According to Boeing Form 10-K for FY 2020, in 2019 Boeing took a revenue reduction of \$8.259 billion "for estimated potential concessions and other considerations to customers related to the 737 MAX grounding, net of \$500 million of insurance recoveries." Boeing 2020 Form 10-K at 35, available at <https://d18rn0p25nwr6d.cloudfront.net/CIK-0000012927/31b93a2e-c565-4279-9806-69750eaa5361.pdf>. Because insured losses from a crime become losses to the insurance company, the total losses would include the \$500 million, producing a total 2019 "loss" of \$8.759 billion. In the next year, 2020, the additional losses related to the 737 MAX grounding were \$498 million (*id.* at 36), producing a total loss for both years of \$9.257 billion.

737 MAX "customer considerations" reflect the estimated "concessions and other considerations to customers for disruptions related to the 737 MAX grounding and associated delivery delays." Boeing to Recognize Charge and Increased Costs in Second Quarter Due to 737

Combining losses to the families (\$1,901,783,118) with the losses to Boeing's customers (\$9,257,000,000), the total losses Boeing caused are \$11,158,000,000. And, under the alternative fines provision, 18 U.S.C. § 3571(d), the loss must be doubled to calculate the fine range, producing a maximum possible fine of \$22,316,000,000. The parties' effort to bind the Court to imposing a fine of only about 2% of the maximum possible<sup>20</sup> is plainly inadequate and would not serve the requirement that the sentence needs "to reflect the seriousness of the offense, to promote respect for the law, and to provide just punishment for the offense." 18 U.S.C. § 3553(a)(1)(2)(A).<sup>21</sup>

**B. The Parties' "Gain" Calculation Is Misleading and Understates Boeing's True Gain of Billions of Dollars.**

For the reasons explained above, in the first instance, the fine range for Boeing should be determined by a loss calculation. *Cf.* 18 U.S.C. § 3571(c) (fine range determined by "*the greater of*" twice the gross loss or gain (emphasis added)). But even if the Court were to avert its eyes from the losses Boeing's crime caused and focus instead on Boeing's ill-gotten "gain," the Court would swiftly find the parties are trying to bind it to adopt an unexplained and misleading calculation that understates Boeing's true gain.

At the outset, it is important to understand that maximizing profits was the very purpose of Boeing's conspiracy. *See* Proposed Plea Agreement ¶ 17 (describing the "purpose of the conspiracy" to include interfering with the FAA "in order to bring about a financial gain to Boeing"). *See generally* House Transportation Comm. Rep. at 24 ("Boeing had tremendous

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MAX Grounding, July 18, 2019, available at <https://boeing.mediaroom.com/2019-07-18-Boeing-to-Recognize-Charge-and-Increased-Costs-in-Second-Quarter-Due-to-737-MAX-Grounding>.

<sup>20</sup> \$487,200,000 proposed fine ÷ \$22,316,000,000 maximum possible ≈ 2.2%.

<sup>21</sup> To be clear, the families are not arguing that the Court would be required to impose a \$22 billion fine. But they have explained that \$22 billion is the maximum *possible* fine—and the parties' failure to acknowledge this foundational fact and calculate a proposed fine against that backdrop should lead the Court to reject the proposed binding plea.

financial incentive to ensure that no regulatory determination requiring pilot simulator training for the 737 MAX was made”).

So what was Boeing’s gain from its crime? \$243,600,000 the parties report. *See* Proposed Plea Agreement ¶ 55. Where did this number come from? In the 2021 DPA, the parties described the number as “representing Boeing’s cost-savings, *based on Boeing’s assessment* of the cost associated with the implementation of full-flight simulator training for the 737 MAX.” DPA ¶ 9(b) (emphasis added).

In other words, the \$243,600,000 gain figure comes from ... Boeing!

And how exactly did Boeing calculate this figure? No one knows—least of all the Court, whom the parties expect to just rubber stamp this figure from the old DPA.<sup>22</sup>

In the current plea agreement, the parties have simply left out the acknowledgment that the figure is “based on Boeing’s assessment of the cost.” *See* Proposed Plea Agreement ¶ 55. One can understand why the parties are apparently too embarrassed to acknowledge the original source of this information. Criminals do not get to calculate their own fines. The Justice Department does not rely on bank robbers to report how much loot they got away with. The Court should be skeptical of this calculation, which is based on defendant Boeing’s own, unexplained accounting.

Moreover, even a quick perusal of information made public by Boeing reveals this figure to be a substantial underrepresentation of Boeing’s gains from obtaining FAA certification of the 737 MAX through fraud. A more fulsome calculation is based on Boeing’s own value of 737 MAX

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<sup>22</sup> Because the figure comes from the old DPA, the figure was cooked up in secret negotiations between the Government and Boeing. Had the Government protected the families’ CVRA rights during the DPA negotiations, the families would have explained the problems with this figure. Reusing this improperly developed figure now violates the families’ CVRA rights.

aircraft orders placed through 2018, with a (conservatively calculated) profit margin of \$7.9 million per aircraft, for a total gain of at least \$2,607,000,000.<sup>23</sup>

The families' calculations are extremely conservative. Some courts have understandably interpreted the "gross *gain*" provision in § 3571(d) as meaning the gross *revenues* that the

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<sup>23</sup> Unlike the parties, the families will "show their work" (and accompanying sources) so that the Court can make its own determination of the reliability of their figures.

To make a "gain" calculation, it is first necessary to determine the "additional before-tax profit to the defendant resulting from the relevant conduct of the offense." U.S.S.G. § 8A1.1, App. Note 3(H). The purpose of Boeing's conspiracy was to secure after-tax profit for Boeing by defrauding the FAA into giving the 737 MAX differences training determination, which would allow Boeing to market 737 MAX over competing aircraft. *See* ECF No. 221-1 at A-2-5. Boeing used the conspiracy to market its planes. *See* ECF No. 221-1 at A-2-12. Accordingly, the profit that Boeing gained through its conspiracy (and associated relevant conduct) can be derived by multiplying (1) the number of 737 MAXs that Boeing was able to successfully market through the illegally obtained FAA determination, multiplied by (2) Boeing's profit per each 737 MAX it sold.

With regard to (1)—the number of planes sold—from the inception of the 737 MAX program, in 2011, through 2018, Boeing won 5,211 orders for the 737 MAX. By the end of 2018, 330 deliveries had been made. Boeing Orders & Deliveries Report, available at <https://www.boeing.com/commercial#orders-deliveries>. To be conservative, we will stop our calculation at the end of 2018, even though the conspiracy continued after that.

With regard to (2)—the before-tax profit per plane—Boeing's Commercial Airplanes Division reported 262 net orders during Q4 2018, valued at \$16 billion. *Id.* In Q4, Boeing received 287 total gross orders, with 248 gross 737 MAX orders. Boeing Orders & Deliveries Report, *supra*. To be conservative, assume all 25 canceled orders were MAX aircraft, resulting in 223 net MAX orders. The approximate value of these orders was \$13.6 billion, or \$61 million per aircraft. In 2018, Boeing's operating margin was 13%—as reflected in Boeing's Form 10-K for the year. <https://www.sec.gov/Archives/edgar/data/12927/000001292719000010/a201812dec3110k.htm/>. Using the \$61 million per aircraft valuation, Boeing's profit per plane was \$7.9 million.

Multiplying (1) and (2) together, i.e., combining 330 deliveries through 2018 at a profit of \$7.9 per plane, Boeing earned \$2,607,000,000 in MAX aircraft deliveries made possible through its criminal conspiracy to defraud the FAA.

The Government could assist in refining this calculation, as it may already be in possession of the purchase contracts or other information about Boeing's profit margins for the 737 MAX.

Boeing's actual profit margin was likely substantially higher than the figures above. Citing Moody's, *Business Insider* reported profit margins for the 737 MAX of \$12-15 million per aircraft before the crash of flight ET 302. *Business Insider*, March 13, 2019, available at <https://www.businessinsider.com/boeing-737-max-profit-moodys-2019-3>.

Notably, largely because of the profitability of the MAX program, Boeing's stock price reached a record high on March 1, 2019—producing a "gain" to the company (and its insiders) that is not captured by the calculations above.



corporation derived from the crime—not the net *profits*. See, e.g., *United States v. Baderi*, 2010 WL 2681707 at \*2 (D. Colo. 2010). The calculation above uses the more restricted, net profits approach. The families’ calculation also does not take into account the benefits accrued to Boeing, as well as its insiders, from the 737 MAX project *before* the fraud was discovered.<sup>24</sup>

In sum, straightforwardly (and extremely conservatively) calculated, the gain to Boeing from its conspiracy crime was at least \$2,607,000,000. And again, under the alternative fines provision, the gain must be doubled, producing a maximum possible fine under this approach of \$5,214,800,000. The parties’ effort to bind the Court to impose a fine of only about 11% of the maximum possible under a gain-from-the-crime theory<sup>25</sup> demands rejection of the plea.<sup>26</sup>

### C. The Parties’ Guidelines Calculations Are Also Inaccurate for Other Reasons.

For the reasons explained above, the maximum possible fine against Boeing in this case is either \$22,316,000,000 (on a “loss” theory) or \$5,214,800,000 (on a “gain” theory). The figures above represent the statutory maximum possible fine that the Court could impose on Boeing.<sup>27</sup> In considering the fine it will ultimately impose, the Court must also consider the Sentencing

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<sup>24</sup> By way of example, Muilenburg, Boeing’s former CEO, made \$23 million in 2018, according to Boeing’s proxy statement—the year the first 737 MAX crashed—on top of the \$49 million he earned during the previous two years. Similarly, Kevin McAllister, former head of Boeing’s commercial division that produced the 737 MAX, was paid more than \$57 million during his nearly three years at the company. In a more detailed calculation, these kinds of gains should also be considered.

<sup>25</sup> \$487,200,000 proposed fine ÷ \$4,214,800,000 maximum possible ≈ 11%.

<sup>26</sup> Here again, the families are not necessarily arguing that the Court would be required to impose a \$5 billion fine. But they have explained that \$5 billion is the maximum *possible* fine on a gain theory—and the parties’ failure to acknowledge this foundational fact as part of their calculation should lead the Court to reject their proposed plea.

<sup>27</sup> Under *Southern Union v. United States*, 567 U.S. 343 (2012), it might be theoretically possible for Boeing to argue that it needs to be indicted on the specific gain or loss amount. But Boeing has waived its Sixth Amendment rights in this case. See ECF No. 3. And, in proposing that the Court should order Boeing to pay a fine of \$487,200,000 under the alternative fines provision, the parties appear to agree that no separate indictment is required to support a fine calculation.

Guidelines. The Sentencing Guidelines, in turn, generally track the statutory calculation of a fine range. Of particular relevance here, the Guidelines provide that the recommended “base fine” under the Guidelines is the greatest of either “the pecuniary gain to the organization from the offense ... or ... the pecuniary loss from the offense caused by the organization, to the extent the loss was caused intentionally, knowingly, or recklessly.” USSG § 8C2.4(a)(2) & (3).

Turning first to “loss” under the Guidelines, Boeing criminally caused its loss at least recklessly. The crime that Boeing committed—conspiracy—is a specific intent crime. *See* Criminal Information, ECF No. 1 (alleging that the Boeing Company “*knowingly and willfully, and with intent to defraud*, conspired and agreed together with others to defraud the United States ....”). This Court has previously recognized the risk associated with Boeing’s crime was death. ECF No. 116 at 16. So Boeing’s intentional criminal conspiracy knowingly and recklessly risked death, meaning Boeing acted (at least) recklessly with respect to the losses it caused. And therefore, applying the loss figures the families recount above, the base Guidelines fine is \$11,158,000,000.

An alternative route to a similar destination is to use a “gain” calculation. The Guidelines provide for a fine calculation based on “the pecuniary gain to the organization from the offense.” No *mens rea* determination is associated with a gain calculation. And, as explained above, Boeing’s gain from its crime was (at least) \$2,607,000,000. But because the loss calculation produces a fine larger than the gain calculation, the Guidelines give preference to the larger loss calculation. *See* U.S.S.G. § 8C2.4(a) (directing use of “the greatest” of gain or loss).

After a base fine calculation is made, the Guidelines use a culpability score to determine minimum and maximum multipliers. *See* U.S.S.G. § 8C2.6. In the 2021 DPA, the parties agreed to a culpability score of 5, DPA ¶ 9(c), and they simply recycle that score in the new agreement, Proposed Plea Agreement ¶ 24(d). As the families explained, *see* Part IV, *supra*, that recycled



But now, in 2024, things have changed ... for the worse. For the last three-and-a-half years, Boeing has breached its obligations under the DPA to reform. As itemized in the proposed plea agreement, Boeing has breached the DPA in multiple ways, such as failing to fully satisfy the DPA's requirement to create and foster a culture of ethics and compliance with the law in its day-to-day operations. Proposed Plea Agreement, Attachment A-1 (factual basis for breach), ¶ 6. Indeed, almost as if to illustrate Boeing's lack of remorse, the introduction to the breach section of the plea agreement indicates that Boeing is not stipulating to the breach finding. *Id.* at ¶ 1. In other words, Boeing is not accepting responsibility for breaching its own promises in the DPA. Even if Boeing was entitled to credit for acceptance of responsibility previously, it no longer is.

Further problems exist with the parties' (stipulated) Guidelines calculation. Because the underlying offense is fraud, the relevant offense guideline is (as the parties' concede) § 2B1.1. There are two obvious enhancements that the parties have failed to add. Specifically, as noted above, under U.S.S.G. § 2B1.1(b)(2)(A)(i), Boeing's offense "involved 10 or more victims"—i.e., 346 victims. A two-level multiple victim enhancement is required. And under U.S.S.G. § 2B1.1(b)(16), the offense "involved ... the conscious or reckless risk of death ...." The Court has previously made such a finding. *See* ECF No. 116 at 16 ("it is generally foreseeable that Boeing's deceiving the AEG, which resulted in an improperly low level of differences training certification, would potentially cause a disaster"). Another two-level enhancement is required.

Against this backdrop, the parties have inaccurately calculated the Sentencing Guidelines in this case. A faithful application of the Guidelines yields not a level 34, as the parties would have the Court buy into, but rather the substantially higher level 42—along with a culpability score not of 5 but rather of 10. A proper Guidelines calculation is as follows:

a. The 2018 U.S.S.G. are applicable to this matter.

b. Offense Level. Based on U.S.S.G. § 2B1.1, the total offense level is 42, as follows:

(a)(2)	Base Offense Level	6
(b)(1)(N)	Amount of Loss/Gain	+30
(b)(10)	Sophisticated Means	+2
(b)(2)	Multiple victims (346 victims)	+2
(b)(16)	Reckless risk of death	+2
		—
<b>TOTAL</b>		<b>42</b>

c. Base Fine. Based upon U.S.S.G. § 8C2.4(a)(2), which imposes a base fine equal to the pecuniary loss to the organization from the offense

if such loss was caused at least recklessly, the base fine is \$11,158,000,000 (representing losses to the families and Boeing’s aircraft customers, as explained above).

d. Culpability Score. Based upon U.S.S.G. § 8C2.5, the culpability score is 10, as follows:

(a) Base Culpability Score	5
(b)(4) the organization had 5,000 or more employees and an individual within high-level personnel participated in, condoned, or was willfully ignorant of the offense	+5
	—
<b>TOTAL</b>	<b>10</b>

Calculation of Fine Range:

Base Fine	\$11,158,000,000
Multipliers	2.0 (min) / 4.0 (max)
Fine Range	\$22,316,000,000 (min) / \$42,632,000,000 (max) <sup>28</sup>

After calculating the proper Guidelines range, the Court must select a point within the range for a fine. In making this selection, the Guidelines provide various factors to consider. For present purposes, it is worth highlighting that one of the factors to be considered is “any nonpecuniary loss caused or threatened by the offense.” USSC § 8C2.8(a)(4). In this case, the victims and their families indisputably suffered enormous nonpecuniary losses—namely the pain and anguish associated with the 346 deaths that Boeing directly and proximately caused. As noted above, Boeing’s current CEO David Calhoun recently described the families’ losses as “gut-wrenching.” That factor alone points to a fine at the upper end of the Guidelines range.

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<sup>28</sup> In addition, for the reasons explained earlier, because 346 deaths directly and proximately resulted from Boeing’s crime, an upward departure is also appropriate. *See* Part III, *supra* (discussing U.S.S.G. § 8C4.2 (risk of death) (policy statement)). The recommended Guideline fines range is subject to the statutory maximum provided by the alternative fines provision, which is discussed above.

In light of the foregoing, the recommended Guidelines fine for Boeing would be at the upper end of the range—i.e., towards \$42,632,000,000, with a possible further upward departure for the hundreds of deaths Boeing caused. The parties concede that a prerequisite to imposing a sentence on Boeing in this case is a proper determination of the applicable guidelines. *See* Proposed Plea Agreement ¶ 23 (citing *United States v. Booker*, 543 U.S. 220 (2005)). Indeed, it would be error for the Court to proceed based on an incorrect Guidelines calculation. *See, e.g., United States v. Suchowolski*, 838 F.3d 530, 532 (5th Cir. 2016) (“the district court must still properly calculate the advisory Guidelines-sentencing range for use in deciding on the sentence to impose”). Because the proposed plea agreement lacks a properly calculated Guidelines-sentencing range, the Court should simply reject the agreement on that ground.

**VI. The Court Should Reject the Plea Because the Compliance Monitor Provision Is Inadequate.**

The parties’ proposed plea also contains a provision for an “independent compliance monitor.” Proposed Plea Agreement ¶ 25(f). It’s about time for a monitor—but the Court should reject the parties’ proposal as insufficient.<sup>29</sup>

The Court will recall that, a year and a half ago, the families first proposed that the Court should order the appointment of a monitor as a condition of Boeing’s supervised release under the DPA. ECF No. 170 at 22-30. At the arraignment hearing, both the Government and Boeing argued against the families’ proposed monitor. Essentially, the parties sold the Court a sanguine story that (at two years into a three-year process) everything was under control because the Department’s

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<sup>29</sup> Even the Department itself recognizes that “a court can . . . reject a plea agreement offered under Federal Rule of Criminal Procedure 11(c)(1)(C) if the judge concludes that the proposed terms of the monitorship do not adequately reflect the nature and seriousness of the offense, do not serve the purposes of a criminal sentence, or otherwise undermine faith in the fairness of the justice system.” Lana N. Pettus, *Court-Appointed Corporate Monitors in Environmental Crimes Cases*, 69 DOJ J. FED. L. & PRAC. 101, 101 (2021).

monitoring was sufficient. The Government told the Court that that the Justice Department was “best positioned to implement the DPA and evaluate Boeing’s compliance with these rigorous requirements. The Fraud Section has compliance experts who routinely evaluate compliance programs and oversee corporate monitorships and self-reporting.” Hrng. Tr. (Jan. 26, 2023) at 96. And Boeing chimed in with a similar tale, recounting that “DOJ has been vigilant and thorough. They’re professional and they probe, and they make suggestions, and as you would imagine, Boeing accepts those suggestions. And Boeing has been vigilant and thorough too. We sincerely believe the system is working and that any further monitor or examiner, reporting, would be duplicative to DOJ oversight and counterproductive to the processes that are operative now.” *Id.* at 113-14.

Have representations to this Court ever proven to be so wide of the mark?!

The Court now knows that Boeing fell dismally—and dangerously— short of meeting its DPA obligations. The Department’s “breach” determination in the agreement spans nine pages. Proposed Plea Agreement, Att. A. That determination recounts how (among other things) Boeing “failed to fully satisfy the [DPA] requirement to create and foster a culture of ethics and compliance with the law in its day-to-day operations, by failing to mitigate known manufacturing and quality risks.” *Id.* at ¶ 6 (internal citation omitted). And public reports of serious concerns about Boeing’s safety are an almost daily occurrence. *See* ECF No. 202 at 6-13.<sup>30</sup>

So now the parties come trotting back to this Court with promises in a plea agreement that—this time—they will get it right. But they offer no explanation for how the Department’s previous and supposedly “vigilant and thorough” monitoring failed. The Court and the public can

<sup>30</sup> Another new serious report emerged just yesterday. *See* <https://www.king5.com/article/news/investigations/investigators/newly-leaked-boeing-document-ethiopian-airlines-737-max-crash/281-7669b39b-6676-44be-a015-030f3e3cc877>.

have little confidence in the Department's monitoring next time without understanding how and why it failed last time.

The plea agreement continues to place the monitoring of Boeing squarely in the Department's hands. Through an elaborate process, DOJ is going to select an "independent" monitor, with input from Boeing. *Id.* at ¶¶ 29-37. During that process, the monitor candidates will "meet with the Defendant and the [prosecutors]", followed by voting within the Criminal Division. *Id.* at 32. The votes will be made "in keeping with the Department's commitment to diversity and inclusion." *Id.* Remarkably, the process makes no provision for the families to have any input into the selection process.

Nor does the process involve this Court. The absence of any judicial role is a change from the plea deal the Government originally described to the Court (and to the families). In the Government's original notice of an agreement in principle, it said it would "notify the Court under seal of its intent to select a certain candidate; and *if*, after 10 days, *the Court does not raise concerns*, the Government will finalize the selection and appoint the monitor." ECF No. 206 at 6 (emphasis added). Now, in the proposed agreement, the parties have simply dropped that judicial-approval provision. *See* Proposed Plea Agreement ¶ 35.

The Court should reject a selection process that deprives it (and the families) of any role in the process. Indeed, some knowledgeable observers have concluded that judges should always select monitors. *See* BRANDON L. GARRETT, TOO BIG TO JAIL: HOW PROSECUTORS COMPROMISE WITH CORPORATIONS 284 (2014). But the Court need not go so far here. Instead, the Court should simply conclude that, given the Government's and Boeing's cozy relationship throughout this case—and serious suggestions that this case may involve "regulatory capture" by Boeing of federal

regulatory agencies<sup>31</sup>—the public cannot have confidence in a Government-selected monitor. The Court must be involved.<sup>32</sup>

But remarkably, not only is the Court excluded from the monitor selection process, but it also lacks any role whatsoever in the monitoring itself. And even if the Court had a role, perhaps even more remarkably, Boeing has *exempted itself from even having to follow the monitoring provisions*, as the defendant’s “compliance obligations” are “not conditions of probation.” The agreement provides:

A condition of probation shall be that the Defendant retain an Independent Compliance Monitor, as provided in Paragraph 7(j). However, *the condition of probation is limited to the retention of the Independent Compliance Monitor—not oversight of the Independent Compliance Monitor or the Company’s compliance with the Independent Compliance Monitor’s recommendations*. Rather, the Independent Compliance Monitor will report to and be overseen by the Offices. The Independent Compliance Monitor’s selection process, mandate, duties, review, and certification as described in Paragraphs 29-37 and Attachment D, and the Defendant’s compliance obligations as described in Paragraphs 7(k), 8, and 9 and Attachment C, *are not conditions of probation*.

Proposed Plea Agreement ¶ 25(f) (emphases added); *see also* Att. D, ¶ 1 (similar language). While the families do not have comprehensive knowledge of all Justice Department monitoring agreements, the families do not believe that this curious provision is a standard one. In the three “standard” cases the Government cited to the court (ECF No. 221 at 1), one of the three involved a monitor—and no such provision is found in the monitoring provisions there. *See United States v. Telefonaktiebolaget LM Ericsson*, No. 1:19-cr-00884, Dkt. 33, Ex. A at ¶ 7(d) (S.D.N.Y. Mar. 20, 2023). And three other recent corporate plea agreements featured on the Fraud Section’s

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<sup>31</sup> *See, e.g.*, U.S. Sen. Commerce Comm., Committee Investigation Report: Aviation Safety Oversight (Dec. 2020), available at <https://www.commerce.senate.gov/services/files/8F636324-2324-43B2-A178-F828B6E490E8>.

<sup>32</sup> Of course, because some of the components of the selection process might be time-consuming, the Court could assign them to a Magistrate Judge or a Special Master as needed.

website contain plea agreements with a compliance monitor—and none contain the curious language that parties propose here. *See United States v. Binance Holdings Limited*, No. 2:23-cr-00178-RAJ, Dkt. 23 at ¶¶ 29-33 (W.D. Wash. Nov. 21, 2023); *United States v. Glencore Ltd.*, No. 3:22-cr-00071-SVN, Dkt. 18 at ¶¶ 25-28 (D. Conn. May 24, 2022) (Att. D); *United States v. Natwest Markets PLC*, No. 3:21-cr-187-OAW, Dkt. 9 at ¶¶ 23-27 (D. Conn. Dec. 21, 2021).

By statute and Guidelines, a court is permitted to impose conditions of probation on a corporation that pleads guilty to an offense. *See* 18 U.S.C. § 3563; *see also* U.S.S.G. § 8D1.1. In addition to standard conditions, the Court may impose any other conditions that the court believes “are reasonably related to the nature and circumstances of the offense or the history and characteristics of the organization....” U.S.S.G. § 8D1.3(c). Against this backdrop, it is hard to understand why the parties are proposing in their plea agreement a non-standard provision setting out “compliance obligations” for Boeing and then specifically indicating that these purported “obligations” are “not conditions of probation.” Are the “obligations” really “obligations”? This non-standard language seems rife with complicated interpretation issues.

As the families understand these provisions, if Boeing willfully decides to ignore the monitor’s recommendations, nothing can be done about it. The “breach” provision in the plea agreement ties back into conditions that are “conditions of probation.” Proposed Plea Agreement ¶ 38. Because Boeing’s “compliance obligations” are *not* conditions of probation, the standard enforcement mechanisms for breach are unavailable.

The central point here is that “[a] corporate probation program necessitates court involvement and functions on behalf of the court.” Veronica Root, “*The Monitor-‘Client’ Relationship*,” 100 VA. L. REV. 523, 539 (2014). Yet the plea agreement curiously attempts to eliminate the Court’s role regarding the monitor by placing all aspects of the monitorship within



the Government's exclusive control. Not only is this dubious as a matter of separation of powers, but it is also unwise policy, given the Government's recent track record of failure in supervising Boeing. And, on top of that, the agreement's "compliance" obligations are rendered unenforceable. *Cf. GARRETT, supra*, at 284 ("A company should not be let off the hook until a judge has reviewed the monitor reports, heard from regulators and prosecutors, and decided it is in the public interest to conclude the case.").

Finally, even if the monitor was appropriately selected and provided enforceable compliance obligations, the parties have given the monitor such a narrow focus that the monitorship will not be able to achieve anything meaningful. The monitorship the parties propose is focused on anti-fraud issues and record-keeping. Thus, the proposed agreement sets out the monitor's "mandate" as evaluating "the effectiveness of the Company's compliance program and internal controls, record-keeping, policies, and procedures as they relate to the Company's current and ongoing compliance with U.S. fraud laws ... with a focus on the integration of its compliance program with its safety and quality programs as necessary to detect and deter violations of anti-fraud laws or policies ...." Proposed Plea Agreement, Att. D ¶ 3. The monitor should have a broader mandate, one that more squarely focuses on the safety issues that are of greatest concern to the public. The families have specifically proposed such a safety-oriented mandate for the monitor that they are currently proposing as a condition of supervised release for Boeing. *See* ECF No. 202-2 at ¶ 1(g)(1)-(15). The Court should reject the parties' proposed monitor because a mandate focused not on safety but on anti-fraud and record-keeping issues is too narrow.<sup>33</sup>

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<sup>33</sup> There are other problems with the proposed monitor as well. For example, the monitor's mandate does not include "substantive review...of the correctness of any of the Company's decisions relating to compliance with the FAA's regulatory regime." Proposed Plea Agreement, Attachment D, ¶ 4 (emphasis added). That leaves some of the most critical aspects of Boeing's safety compliance outside the monitor's authority.

**VII. The Court Should Reject the Plea Because the Provision Requiring Boeing to Make New Investments in Compliance, Quality, and Safety Programs Is Unenforceable and Inadequate.**

As a term of its probation, Boeing has agreed to make an additional investment in its compliance, quality, and safety programs. While the additional-investment requirement is seemingly a step forward, on closer examination, the provision is essentially unenforceable and plainly inadequate to protect public safety.

In the proposed plea agreement, Boeing promises to make a new investment of \$455,000,000 over the three-year term of probation into its programs for (1) compliance, (2) quality, and (3) safety. *See* Proposed Plea Agreement ¶ 25(g) (“the Defendant shall invest in its compliance, quality, and safety programs, a total of at least \$455,000,000”). This translates into an approximate investment of \$152 million per year for three years across three programs—i.e., Boeing’s compliance program, quality program, and safety programs.

The parties tout this number as “an increase of approximately 75% above [Boeing’s] previously planned expenditures on its *corporate compliance program* for fiscal year 2024” (Proposed Plea Agreement ¶ 25(g) (emphasis added)), suggesting that Boeing had planned an approximately \$87 million expenditure for its “corporate compliance” program for the 2024 fiscal year. But, misleadingly, the parties provide no comparison for Boeing’s planned expenditures for Boeing’s quality or safety programs for any earlier years. A comparison of an investment across three programs to only one of those programs cannot be a fair representation of the size of the

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There are also various provisions allowing the monitor to provide only “executive summaries” of the monitor’s reports on the public docket. *See, e.g., id.*, ¶ 14. But the ultimate issues regarding what should and should not be made public should rest in the hands of the Court, not the monitor.

Finally, the monitor is also given only a three-year term to complete the work involved. Proposed Plea Agreement ¶ 14. Given the complexity of the issues, a five-year term is more appropriate.

projected “increase” in investment. Moreover, any expenditures made by Boeing to implement internal support for the Independent Compliance Monitor are specifically identified as “qualifying investments” (*id.*), further artificially inflating the value of the proposed term of probation.

This provision will only have meaning if it is enforced. In a nod to this point, the plea agreement requires Boeing to “periodically, and no less than annually, provide proof of the accumulated investment amounts to the [Government] and the Probation Office.” Proposed Plea Agreement ¶ 25(g). But how the prosecutors and the Court’s probation office will have the required expertise to evaluate the complicated information Boeing provides is unclear. Curiously, in setting up the mandate for the one person who might have both the perceived independence and required expertise to make such evaluation—the independent compliance monitor—the parties have specifically excluded review of this information. *See* Proposed Plea Agreement, Att. D, ¶ 3 (“independent compliance monitor’s mandate” limited to monitoring Paragraph 7(k) of the Agreement concerning anti-fraud programs).

Boeing and the Government have also declined to reveal to the Court any specifics about Boeing’s historical expenditures for its compliance, quality, or safety programs. This absence of specific comparison data means it will not be possible to meaningfully evaluate whether Boeing is truly making new “investments” rather than recharacterizing expenditures it was already planning to make for other reasons.

As an example of this problem, on about May 30, 2024 (six weeks before agreeing to the plea deal here), Boeing representatives met with the FAA and presented what Boeing described as “sweeping changes to the company’s production process and safety systems.” Gregory Wallace, *Three-Hour Meeting Ends with FAA Saying Boeing Can’t Increase Max Plane Production Until*

*Quality is Fixed*, CNN (May 30, 2024).<sup>34</sup> It appears that these previously promised “sweeping changes” count as “new” investments for purposes of the plea agreement. *See* Proposed Plea Agreement ¶ 25(g) (promising increased spending above that “previously planned” for “fiscal year 2024,” which would mean spending above that previously planned as of the start of Boeing’s fiscal year—i.e., as of January 1, 2024). This is deceptive sleight of hand, giving Boeing credit in the plea agreement for things it had already planned to do.<sup>35</sup> And, on top of all this, the public can have no confidence that Boeing is truly making any “investments” because Boeing’s “proof” will apparently not be made available for public scrutiny.

Finally, an even more glaring problem with this provision is its utter inadequacy as a corrective measure. The “new” investment is a drop in a very large bucket.

In order to properly contextualize this term of probation, it is proper to examine Boeing’s cost of sales in previous years, since cost of sales includes overhead costs, raw materials, parts, and labor. Essentially cost of sales represents the costs incurred as a result of revenue realized in a given year for goods and services. Boeing’s annual reports (Form 10-K) show cost of sales in 2023 at \$70,070,000,000, in 2022 at \$63,078,000,000, and in 2021 at \$59,237,000,000. Form 10-K, Boeing, Dec. 31, 2023 at 27.<sup>36</sup> These numbers yield an average annual cost of sales over that three-year period of approximately \$64 billion. An increased investment of \$152 million per year would

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<sup>34</sup> Available at <https://www.cnn.com/2024/05/30/business/boeing-safety-plan-faa/index.html>.

<sup>35</sup> The parties pulled off the same legerdemain in the DPA, giving Boeing “credit” for making payments through the DPA to its airline customers that Boeing was already contractually obligated to make. *See* ECF No. 65 at 8 (“The Government deceptively tried to take credit for these monies that not only were owed contractually, and independently of any investigation, but also had already been paid by the time the DPA was executed. The only reason for listing these amounts in the DPA was to mislead the public into believing the Government had obtained a \$2.5 billion criminal settlement.”).

<sup>36</sup> Available at [https://s2.q4cdn.com/661678649/files/doc\\_financials/2023/q4/BOEING-10Q-Q42023-013124.pdf](https://s2.q4cdn.com/661678649/files/doc_financials/2023/q4/BOEING-10Q-Q42023-013124.pdf).

represent, on average, only an approximately 0.24% increase—a pittance.<sup>37</sup> Such a small amount cannot be expected to “afford adequate deterrence to criminal conduct” or to “protect the public from further crimes of the defendant.” 18 U.S.C. § 3553(a)(2)(B) & (C).

**VIII. The Court Should Reject the Plea Agreement Because the Restitution Provision is Misleading and Unfairly Allows Boeing to Tie Up Restitution Through Extensive Litigation and Appeals.**

The parties also misleadingly try to give Boeing credit for having “agreed to pay lawful restitution owed” to the families. Proposed Plea Agreement ¶ 6(f). But Boeing has agreed to little more than to follow the law and pay whatever restitution the Court awards. *See* Proposed Plea Agreement ¶ 25(c) (“The Court will determine *whether* restitution is owed to *any* Crash Victim Family .... The Defendant retains the right to *contest any restitution claim* and make any argument related thereto ....” (emphases added)). In fact, Boeing appears to be setting up a legal position that it owes no restitution whatsoever. In agreeing to pay only “*lawful* restitution,” Boeing is apparently maintaining its position that the families do not represent “victims” of Boeing’s crime and, thus, that no restitution would be “lawful.”<sup>38</sup>

The Court, of course, is familiar with the standard language in plea agreements presented to it by the U.S. Attorney’s Office for the Northern District of Texas in which defendants affirmatively agree to pay restitution. For example, just a few months ago, the Court handled *United States v. Bender*, 4:24-cr-074-O (N.D. Tex.). The plea agreement there provided:

The defendant agrees that the Court is authorized to order, and *the defendant agrees to pay, restitution* for all loss resulting from the offense(s) of conviction and all relevant conduct, in an amount to be determined by the Court.

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<sup>37</sup> As another point of comparison, in the years leading up to the two crashes, between March 2014 and September 2018, Boeing “bought back” approximately \$38,000,000,000 worth of common stock.

<sup>38</sup> Boeing made exactly this argument last year to Fifth Circuit, claiming that the families did not represent crime “victims.” *See* Boeing’s Resp. to Mandamus Petition at 26, *In re Ryan*, No. 23-10168 (5th Cir. Mar. 27, 2023).

*Bender*, ECF No. 19 at ¶ 9 (emphasis added). This apparently standard provision<sup>39</sup> is what a defendant in this District agrees to when he or she is truly remorseful and wants to pay restitution. The seemingly unique language in the Boeing plea deal appears to be designed to let Boeing have it both ways: appear to agree to restitution but, in fact, agree to nothing.

But it gets worse. Typically in this District, prosecutors support recognized crime victims when they assert restitution claims. Indeed, such support is statutorily required by the CVRA. *See* 18 U.S.C. § 3771(a)(8) (extending to crime victims “[t]he right to fully and timely restitution as provided in law”) and § 3771(c)(1) (requiring Justice Department employees to “make their best efforts to see that crime victims are ... accorded the rights [in the CVRA]”). In this case, however, the families cannot even count on the normal, statutorily required support from the prosecutors. Instead, in a remarkable (and so far as undersigned counsel is aware, truly unique) provision, the prosecutors here merely “*retain the right to support any legally authorized claims for restitution presented by a Crash Victim Family.*” Proposed Plea Agreement ¶ 25(c). If the families understand this provision correctly, the Government “retains the right” to support legally authorized restitution claims—but then again, the Government presumably retains the right *not* to support such claims. How this discretionary approach squares with the law (or commonsense) is hard to understand.<sup>40</sup>

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<sup>39</sup> In many cases before this Court (e.g., immigration cases), no restitution is possible. In the cases where restitution is possible, something like the provision above seems to be standard. *See, e.g., United States v. Cisneros*, No. 4:24-cr-018-O, ECF No. 18 at ¶ 9 (N.D. Tex. Mar. 27, 2024) (substantially the same language as above); *United States v. Cota*, No. 4:24-cr-0005-Y, ECF No. 19 at ¶ 9 (same).

<sup>40</sup> The families fear that the Government and Boeing may possibly have reached a secret side deal, under which the Government does not plan to support restitution requests. During the June 30, 2024, information meeting, the Government told the families that the plea terms it was extending to Boeing included the Government’s agreement to “stand silent” on restitution requests. Then, on July 9, 2024, during a call with the Government, the families’ counsel asked whether the “stand silent” terms were still part of the deal. The Government declined to answer directly, referring counsel to the terms sheet filed with the Court—which, in turn, contained no information

But it gets even worse. The plea agreement indicates that Boeing retains the right “that, with respect to any restitution amount the Court determines the Defendant owes a crash Victim Family, the Court should credit, and thus deduct from the restitution amount, *any other amount* the Defendant has previously paid to the Crash Victim Family.” Proposed Plea Agreement ¶ 25(c) (emphasis added). Such a sweeping offset goes beyond what existing law and agreements permit. For example, when Boeing paid \$500 million to the victims’ families under the DPA, Boeing promised that it would “not use the fact that any beneficiary of the crash victims ... seeks or receives any compensation from the Crash-Victim Beneficiaries Compensation Amount to seek to preclude such beneficiary from pursuing any other lawful claim that such beneficiary might have against the Company.” DPA ¶ 19. And while there is a federal restitution statute covering offsets for payments made to victims, that provision is limited to payments made in a “civil proceeding” for the “same loss” (18 U.S.C. § 3664(j)(2))—not to “any other amount” paid by defendant, as indicated in the plea agreement. Boeing is seemingly seeking to rewrite its earlier DPA commitments and circumvent the limitations on offsets contained in federal law.

And then it gets even worse on appeal. Boeing has put into the agreement a provision that it will not have to pay restitution until “completion of any timely and properly noticed appeal.” Proposed Plea Agreement ¶ 25(c). As the Court is aware, typically whether restitution (or other sentencing obligations) are stayed pending appeal is reviewed in the first instance by the Court, to determine whether a stay is appropriate. *See* Fed. R. Crim. P. 38(e) (giving the Court discretion on whether to stay a restitution order pending appeal). Boeing is cleverly seeking to do an end-run

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on this subject. *See* ECF No. 206 at 5 (“The plea agreement will allow the court to determine the restitution amount for the families in its discretion, consistent with applicable legal principles”). But now, the Agreement contains a unique, retain-the-right-to-support provision that the parties have cooked up without involving the families and with uncertain meaning.

around the normal judicial review of a stay request required by the rules. If the Court approves the agreement now, this end-run will permit Boeing to tie up any restitution award for months and months—placing pressure on victims’ families to accede to whatever demands Boeing might make.

To be clear, it may turn out that most of the families will decide not to pursue restitution awards. The families have generally been focusing on obtaining justice in the criminal case, rather than compensation. But there will likely be at least some families who received inadequate payments from Boeing and who will choose to seek restitution. The unusual hurdles that they would face under the unique terms of this proposed plea agreement provide further grounds for the Court to reject this inappropriate plea agreement.<sup>41</sup>

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<sup>41</sup> At a minimum, the Court should defer a decision on accepting Boeing’s plea until it has an opportunity to review a pre-sentencing report. The parties purport to “waive” the preparation of a Pre-Sentencing Investigation Report in the proposed agreement (Proposed Plea Agreement ¶ 27) but acknowledge that the final decision rests with the Court. For the multiple reasons explained above, the families believe that the Court should simply reject the parties’ proposed agreement now. But at the very least, the Court should order a more thorough investigation of the facts of this case before making its decision. *See* Fed. R. Crim. P. 11(c)(3) (court may “defer” a decision on a proposed plea “until the court has reviewed the presentence report”).



## CONCLUSION

The Court should reject the proposed plea agreement, pursuant to its authority under Fed. R. Crim. P. 11(c)(3)(A). The Court should make its announcement that it is rejecting the plea directly to Boeing in open court, as required by the federal rules. *See* Fed. R. Crim. P. 11(c)(5) (“If the court rejects a plea agreement containing provisions of the type specified in Rule 11(c)(1)(A) or (C), the court *must* do the following on the record and in open court ... [i.e.,] inform the parties that the court rejects the plea agreement ....” (emphasis added)). Consistent with recognized practice in this Circuit, the Court should give its reasons for rejecting the proposed plea agreement. *See United States v. Smith*, 417 F.3d 483, 488 (5th Cir. 2005) (the district court “may state its reasons for rejecting a plea agreement” but cannot “also suggest the plea agreements that would be acceptable” or provide comments “on the hypothetical agreements it would or would not accept”). The families respectfully request that the Court give as its reasons for rejecting the proposed plea the reasons the families outline above.

After rejecting the plea agreement, the Court should exclude from the Speedy Trial Act calculation the time between July 7, 2024, and the date of its rejection of the plea, pursuant to 18 U.S.C. § 3661(h)(1)(G) (time excluded while plea under consideration). The Court should then set the matter for a jury trial within 70 days.

Dated: July 31, 2024

Respectfully submitted,

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## CERTIFICATE OF SERVICE

I certify that on July 31, 2024, the foregoing document was served on the parties to the proceedings via the Court's CM/ECF filing system.

/s/ *Paul G. Cassell*

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Paul G. Cassell

**UNITED STATES DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF TEXAS  
FORT WORTH DIVISION**

UNITED STATES OF AMERICA,

Plaintiff

V.

THE BOEING COMPANY,

*Defendant.*

Case No. 4:21-cr-00005-O-1

**PROPOSED ALTERNATIVE STATEMENT OF FACTS BY RECOGNIZED CRIME  
VICTIMS' FAMILY MEMBERS NAOISE CONNOLLY RYAN, ET AL. TO  
ACCOMPANY ANY PLEA AGREEMENT IN THIS CASE**

## EXHIBIT 1

## **PROPOSED ALTERNATIVE STATEMENT OF FACTS**

Naoise Connolly Ryan et al.<sup>1</sup> (the “victims’ families” or “families”), respectfully submit to the Court the following proposed statement of facts, which supplements the limited recitation of facts made by the Government and Boeing in connection with their proposed plea agreement. The following facts include and add to the 55 facts already provided by the parties, all of which are relevant to the Court’s decision whether to accept the plea and whose accuracy is reasonably established by or inferable from the sources cited herein. The additional facts are in **red bold font**.

1. The following Statement of Facts is incorporated by reference as part of the Deferred Prosecution Agreement (the “Agreement”) between the United States Department of Justice, Criminal Division, Fraud Section (the “Fraud Section”), the United States Attorney’s Office for the Northern District of Texas (the “USAO-NDTX”) and The Boeing Company (“Boeing” or the “Company”). The Company hereby agrees and stipulates that the following information is true and accurate. The Company admits, accepts, and acknowledges that it is responsible for the acts of its officers, directors, employees, and agents as set forth below. Should the Fraud Section or the USAO-NDTX pursue the prosecution that is deferred by this Agreement, the Company agrees that it will neither contest the admissibility of, nor contradict, this Statement of Facts in any such proceeding. The following facts establish beyond a reasonable doubt the charge set forth in the Information attached to this Agreement:

<sup>1</sup> In addition to Ms. Ryan, the other victims' family members filing this motion are Emily Chelangat Babu and Joshua Mwazo Babu, Catherine Berthet, Huguette Debets, Luca Dieci, Bayihe Demissie, Sri Hartati, Zipporah Kuria, Javier de Luis, Nadia Milleron and Michael Stumo, Chris Moore, Paul Njoroge, Yuke Meiske Pelealu, John Karanja Quindos, Guy Daud Iskandar Zen S., and others similarly situated. Many family members support this motion. On Friday of this week, the families will file with the Court an Appendix of other supporters of this motion.

## Background

At all times relevant to this Statement of Facts, with all dates being approximate and inclusive:

## Boeing's New Airplane: The 737 MAX

2. The Boeing Company (“Boeing”) was a U.S.-based multinational corporation that designed, manufactured, and sold commercial airplanes to airlines worldwide. Boeing operated from various locations, including in and around Seattle, Washington.

3. Boeing's airline customers included major U.S.-based airlines headquartered in the Northern District of Texas and elsewhere.

4. The Boeing 737 was a commercial airplane that could seat approximately 200 passengers and was one of Boeing's best-selling airplane models. Boeing began designing, manufacturing, and selling the Boeing 737 in the 1960s. Over time, Boeing designed, manufactured, and sold new versions of the Boeing 737 to its airline customers, including major U.S.-based airlines.

5. In or around June 2011, Boeing began developing and marketing a new version of its Boeing 737 called the 737 MAX. The 737 MAX was designed by Boeing as a competitive answer to a new version of an airplane developed by one of Boeing's top rivals in commercial airplanes, Company-1. Like the new version of Company-1's airplane, the 737 MAX promised increased fuel efficiency over its prior version, the 737 Next Generation ("737 NG"). With this increased efficiency, the 737 MAX offered fuel-cost savings for airlines.

### *The FAA AEG's Role in Determining Pilot "Differences Training" for New Airplanes*

6. Before any U.S.-based airline could operate a new commercial airplane, U.S. regulations required the Federal Aviation Administration (“FAA”), an organization within the

United States Department of Transportation, to evaluate and approve the airplane for commercial use. Without this approval, a U.S.-based airline would not be permitted to operate the airplane.

7. As part of this evaluation and approval process, the FAA had to make two distinct determinations: (i) whether the airplane met U.S. federal airworthiness standards; and (ii) what minimum level of pilot training would be required for a pilot to fly the airplane for a U.S.-based airline. These two determinations were made by entirely different groups within the FAA that were composed of different personnel with different organizational structures and different reporting lines.

8. The FAA Aircraft Evaluation Group (“AEG”) was principally responsible for determining the minimum level of pilot training required for a pilot to fly the airplane for a U.S.-based airline. To make that determination, the FAA AEG compared the new version of the airplane (such as the 737 MAX) to a similar, prior version of the airplane (such as the 737 NG). After evaluating the differences between the new and prior versions of the airplane, the FAA AEG mandated the minimum level of pilot training, known as “differences training,” for the new version.

9. Based on the nature and extent of the differences between the new and prior version of the airplane, the FAA AEG assigned a level of differences training ranging from “Level A” through “Level E.” These levels of differences training ranged in rigor, with “Level A” being the least intensive and “Level E” the most intensive. As relevant here, “Level B” differences training generally included computer-based training (“CBT”), and “Level D” differences training generally included full-flight simulator training.

10. At the conclusion of the FAA’s evaluation of the new version of the airplane, the FAA AEG published a Flight Standardization Board Report (“FSB Report”). Among other things,

the FSB Report contained relevant information about certain airplane systems and parts that the airplane manufacturer was required to incorporate into airplane manuals and pilot-training materials for all U.S.-based airlines that would fly the airplane. The FSB Report also contained the FAA AEG's differences-training determination.

## Boeing's Organization Designation Authorization (ODA) Program

10a. Starting in 2005, under Title 49 of the United States Code (49 U.S.C.) § 44702(d), the FAA could delegate to a qualified private person a matter related to issuing certificates, or related to the examination, testing, and inspection necessary to issue a certificate on behalf of the FAA Administrator. The Organization Designation Authorization (ODA) program is the means by which the FAA grants designee authority to organizations or companies. ODA holders are typically authorized to conduct the types of FAA functions which they would normally seek from the FAA. For example, aircraft manufacturers may be authorized to approve design changes in their own products.<sup>2</sup>

10b. The FAA ODA program was fully phased in by 2009. Boeing was an organization designee.<sup>3</sup>

**10c. At Boeing, employees working as part of the ODA program were known as “Authorized Representatives,” abbreviated as “AR,” and they represented the FAA within the company, including oversight and authorization for compliance and training issues.**

## Boeing's 737 MAX Chief Technical Pilots

<sup>2</sup> (FAA Delegated Organizations, [https://www.faa.gov/other\\_visit/aviation\\_industry/designees\\_delegations/delegated\\_organizations](https://www.faa.gov/other_visit/aviation_industry/designees_delegations/delegated_organizations))

<sup>3</sup> (FAA Office of Inspector General Audit Report Number AV-2011-136, June 29, 2011, available at <https://www.oig.dot.gov/sites/default/files/FAA%20ODA%206-29-11.pdf>)



13. From in or around mid-2014 until in or around July 2018, Boeing Employee-2 was a Technical Pilot for Boeing's 737 MAX Flight Technical Team. In or around July 2018, after Boeing Employee-1 left Boeing, Boeing Employee-2 became Boeing's 737 MAX Chief Technical Pilot. In that role, Boeing Employee-2 led the 737 MAX Flight Technical Team.

15. Boeing Employee-1 and Boeing Employee-2 also understood that, because flight controls were vital to flying modern commercial airplanes, differences between the flight controls

16. From at least in and around ~~November 2016~~ **May 2013** through at least in and around December 2018, in the Northern District of Texas and elsewhere, Boeing, through **its employees including but not limited to** Boeing Employee-1 and Boeing Employee-2, knowingly, and with intent to defraud, conspired to defraud the FAA AEG.

### **Lead-Up to the Conspiracy and Scheme to Defraud**

18. To achieve its promised fuel efficiency, the 737 MAX used larger engines than the 737 NG. These larger engines, and their placement under the airplane's wings, meant that the aerodynamics of the 737 MAX differed from those of the 737 NG.

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speed, wind-up turn. A high-speed, wind-up turn generally involved sharply turning the airplane at high speed (approximately Mach 0.6-0.8) in a corkscrew-like pattern.

20. A high-speed, wind-up turn was a “certification” maneuver, that is, a maneuver outside the limits of what the 737 MAX would be expected to encounter during a normal commercial passenger flight. Nevertheless, if Boeing did not fix the 737 MAX’s pitch-up characteristic in high-speed, wind-up turns, the FAA could determine that the 737 MAX did not meet U.S. federal airworthiness standards.

21. To fix this pitch-up characteristic, Boeing created MCAS and incorporated it as a part of the 737 MAX’s flight controls. MCAS was an aircraft “part” within the meaning of Title 18, United States Code, Sections 31(a)(7) and 38. In operation, MCAS would automatically cause the airplane’s nose to pitch down by adjusting the 737 MAX’s horizontal stabilizer (a horizontal tail located near the rear of the airplane). As originally designed, MCAS could only activate during a high-speed, wind-up turn.

*Boeing’s Financial Incentive and Manipulation of ODA Program to Secure No Greater than “Level B” Differences Training in the 737 MAX FSB Report*

22. As Boeing knew, “Level B” differences training was significantly less expensive for airlines to complete than “Level D.” For example, a pilot could complete “Level B” differences training from anywhere in the world in a matter of hours using a computer or tablet. In contrast, a pilot could complete “Level D” differences training only by appearing in person wherever the pilot’s airline operated a full-flight simulator. Apart from the cost of acquiring one or more multimillion-dollar simulators and other related expenses, airlines that were required by the FAA AEG to train pilots on a full-flight simulator could also lose revenue that the pilot might otherwise have generated from flying airline passengers during that time. Accordingly, if the FAA AEG required a less rigorous level—such as “Level B”—of differences training for the 737 MAX in the

737 MAX FSB Report, the 737 MAX would be a more attractive option for Boeing's airline customers already flying the 737 NG than switching to an entirely new airplane, such as the new version of Company-1's airplane, as such customers would save significant money in pilot-training costs by transitioning to the 737 MAX.

23. Principally for this reason, Boeing's stated objectives in designing the 737 MAX included securing the FAA AEG's determination to require no greater than "Level B" differences training in the 737 MAX FSB Report.

**23a. For example, in a May 2013 engineering meeting regarding MCAS, which involved at least five Boeing participants, Boeing employees identified a "problem:" that "[e]very new buzzword represents a company and airline cost via changed manuals, changed training, changed maintenance manuals," and they recommended Boeing "[i]nvestigate deletion of MCAS nomenclature and cover under the umbrella of 'revised speed trim.'" (Attachment A-1, BOE\_ETH\_01706114).**

**23b. Later, one of the meeting participants reported to a colleague that the "reason for changing MCAS to something under the speed trim name was to reduce extra Company and Airlines costs by requiring less changes to manuals, training, and maintenance manuals." (Attachment A-2, BOE\_ETH\_00425950).**

**23c. In June 2013 meetings, the same group discussed that if Boeing "emphasize[d] MCAS [a]s a new function there may be a greater certification and training impact." They decided, "[e]xternally we would communicate it as an addition to Speed Trim. [] Internally continue using the acronym MCAS (within variable names etc)." Additionally, they planned to "[w]ork with AR on certification perspective to ensure this strategy is acceptable... This**

**will allow us to maintain the MCAS nomenclature while not driving additional work due to training impacts and maintenance manuals.” (Attachment A-1).**

**23d. Likewise,** Boeing Employee-1 and Boeing Employee-2 understood as much. For example, in or around November 2014, Boeing Employee-2 wrote in an internal Boeing electronic chat communication to Boeing Employee-1 that “nothing can jepordize [sic] level b[.]” In or around December 2014, Boeing Employee-1 wrote in an email to another Boeing employee that “if we lose Level B [it] will be thrown squarely on my shoulders. It was [Boeing Employee-1], yes [Boeing Employee-1]! Who cost Boeing tens of millions of dollars!”

*Boeing Employee-1 and Other Boeing Employees Told the FAA AEG that MCAS was Limited to High-Speed, Wind-Up Turns*

24. In or around June 2015, Boeing Employee-1 and other Boeing employees briefed the FAA AEG on MCAS. During this briefing, Boeing described MCAS as a system that could only activate during a high-speed, wind-up turn. After the briefing, Boeing Employee-1 and another Boeing employee further discussed MCAS with an FAA AEG employee (“FAA AEG Employee-1”) and reiterated to FAA AEG Employee-1 the limited operational scope of MCAS.

*Boeing Subsequently Expanded MCAS’s Operational Scope Beyond High-Speed, Wind-Up Turns*

25. Subsequently, Boeing expanded MCAS’s operational scope, including the speed range within which MCAS could activate, significantly altering its original design. Among other things, when the airplane registered a high angle of attack, the change expanded the speed range within which MCAS could activate from approximately Mach 0.6-0.8 to approximately Mach 0.2-0.8—that is, from only high-speed flight to nearly the entire speed range for the 737 MAX, including low-speed flight, which generally occurs at a lower altitude and in and around takeoff and landing. Boeing disclosed this expansion to FAA personnel, but only to those personnel who were responsible for determining whether the 737 MAX met U.S. federal airworthiness standards.

26. On or about August 16, 2016, before the FAA AEG published the 737 MAX FSB Report, the FAA AEG issued a provisional “Level B” differences-training determination for the 737 MAX. At the time of this provisional determination, the FAA AEG was unaware that Boeing had expanded MCAS’s operational scope.

28. As Boeing Employee-1 and Boeing Employee-2 knew, the FAA AEG based its provisional “Level B” differences training for the 737 MAX in part on its understanding that MCAS could only activate during the limited operational scope of a high-speed, wind-up turn.

30. For example, in an email to Boeing employees including Boeing Employee-2 discussing a potential change to another part of the 737 MAX's flight controls on or about November 10, 2016, Boeing Employee-1 emphasized that "[o]ne of the Program Directives we were given was to not create any differences [ . . . ]. This is what we sold to the regulators who have

already granted us the Level B differences determination. To go back to them now, and tell them there is in fact a difference [. . .] would be a huge threat to that differences training determination.”

### **The Conspiracy Begins**

#### **“Shocker Alert”: Boeing Employee-1 and Boeing Employee-2 Discovered MCAS’s Expanded Operational Scope**

31. On or about November 15, 2016, during a test flight of the 737 MAX in a simulator, Boeing Employee-1 experienced what Boeing Employee-1 recognized as MCAS operating at lower speed. Boeing Employee-1 further recognized that this lower-speed operation was different from what Boeing had briefed and described to the FAA AEG.

32. On or about that same day, Boeing Employee-1 and Boeing Employee-2 discussed MCAS in an internal Boeing electronic chat communication, writing in part:

Boeing Employee-1: Oh shocker alert! [sic] / MCAS is now active down to [Mach] .2 / It’s running rampant in the sim on me / at least that’s what [a Boeing simulator engineer] thinks is happening

Boeing Employee-2: Oh great, that means we have to update the speed trim description in vol 2

Boeing Employee-1: so I basically lied to the regulators (unknowingly)

Boeing Employee-2: it wasn’t a lie, no one told us that was the case

33. At this point, Boeing Employee-1 and Boeing Employee-2 recognized that the FAA AEG was under the misimpression that MCAS operated only during a high-speed, wind up turn and could not operate at lower Mach speeds, such as at Mach 0.2. Boeing Employee-1 and Boeing Employee-2 therefore knew, at least as of the time of this chat communication, that the FAA AEG’s provisional “Level B” differences-training determination had been based in part on outdated and inaccurate information about MCAS.

34. Boeing Employee-1 and Boeing Employee-2 also knew that MCAS's expanded operational scope was relevant to the FAA AEG's decisions about the content of the 737 MAX FSB Report, including whether to include information about MCAS. Boeing Employee-1 and Boeing Employee-2 similarly understood that it was their responsibility to update the FAA AEG about any relevant changes to the 737 MAX's flight controls—such as MCAS's expanded operational scope.

35. Despite knowing that the FAA AEG had issued its provisional "Level B" determination without any awareness that MCAS's operational scope had been expanded to include high angle of attack conditions in nearly the entire speed range of ordinary commercial flight, Boeing Employee-1 and Boeing Employee-2 did not correct the FAA AEG's understanding of MCAS's operational scope or otherwise ensure that the FAA AEG's "Level B" determination was based on an accurate understanding of MCAS's operation. Instead, Boeing—through Boeing Employee-1 and Boeing Employee-2—intentionally withheld and concealed from the FAA AEG their knowledge of MCAS's expanded operational scope.

*Boeing, through Boeing Employee-1 and Boeing Employee-2, Deceived the FAA AEG about MCAS's Operational Scope and Told the FAA AEG to Delete MCAS from the 737 MAX FSB Report*

36. For example, shortly after the simulated test flight described in paragraph 30, Boeing Employee-1 talked with FAA AEG Employee-1, who asked Boeing Employee-1 about the simulated test flight. Boeing Employee-1 intentionally withheld and concealed from FAA AEG Employee-1 the fact that MCAS's operational scope had been expanded beyond what the FAA AEG relied upon when it issued its provisional "Level B" differences-training determination for the 737 MAX.

37. Around the time that Boeing Employee-1 and Boeing Employee-2 discussed MCAS's expanded operational scope, Boeing Employee-1 asked a Boeing senior engineer



assigned to the 737 MAX program about MCAS's operational scope. The senior engineer confirmed to Boeing Employee-1 that MCAS could activate beyond the limited operational scope of a high-speed, wind-up turn. The senior engineer suggested that Boeing Employee-1 contact certain subject-matter experts at Boeing for more specific information about MCAS's operational scope.

38. On or about November 17, 2016, the FAA AEG emailed three Boeing employees, including Boeing Employee-1, Boeing Employee-2, and another Boeing employee, a draft of the forthcoming 737 MAX FSB Report. That same day, Boeing Employee-1 asked Boeing Employee-2 and the other Boeing employee to review the draft 737 MAX FSB Report "for any glaring issues."

39. On or about November 22, 2016, the other Boeing employee emailed the draft 737 MAX FSB Report back to the FAA AEG with proposed edits. Boeing Employee-1 and Boeing Employee-2 were included on this email. Boeing Employee-1 included a proposed edit to delete a reference to MCAS, and wrote, "We agreed not to reference MCAS since it's outside normal operating envelope." Neither Boeing Employee-1 nor Boeing Employee-2 shared the fact of MCAS's expanded operational scope with the FAA AEG or otherwise corrected the FAA AEG's misimpression that MCAS's operational scope was limited to high-speed, wind-up turns.

40. In doing so, Boeing Employee-1 and Boeing Employee-2 deceived the FAA AEG into believing that the basis upon which the FAA AEG had initially "agreed" to remove any information about MCAS from the 737 MAX FSB Report—that MCAS could only activate during the limited operational scope of a high-speed, wind-up turn—remained the same. Boeing Employee-1 and Boeing Employee-2 withheld their knowledge of MCAS from the FAA AEG to

42. By concealing MCAS's expanded operational scope from the FAA AEG, Boeing, through Boeing Employee-1 and Boeing Employee-2, defrauded, impaired, obstructed, defeated, and interfered with the FAA AEG's lawful function to evaluate MCAS and to include information about MCAS in the 737 MAX FSB Report.

44. From in or around January 2017 through in or around July 2017 (when the 737 MAX FSB Report was published), Boeing Employee-1 and Boeing Employee-2 sent and caused to be sent emails to representatives of various Boeing airline customers that had agreed to purchase the 737 MAX, including major U.S.-based airlines. In these emails, Boeing Employee-1 and Boeing Employee-2 or members of their 737 MAX Flight Technical Team referenced and included drafts of the forthcoming 737 MAX FSB Report and airplane manuals and pilot-training materials for Boeing's 737 MAX airline customers. None of these items contained any information about



50. In and around the same time, Boeing employees, including Boeing Employee-2, met with personnel from the FAA AEG to discuss, among other things, MCAS's operational scope. After that meeting, Boeing Employee-2 told FAA AEG Employee-1 that he was previously unaware of MCAS's expanded operational scope and otherwise misled FAA AEG Employee-1 about Boeing Employee-2's prior knowledge of MCAS.

51. Also, in and around the same time, Boeing Employee-2 caused Boeing to present a false and misleading presentation to the FAA AEG about MCAS. Boeing investigated, among other things, what information Boeing Employee-1 and Boeing Employee-2 provided to the FAA AEG about MCAS. In connection with this investigation, Boeing Employee-2 caused Boeing to represent in a presentation to the FAA AEG that, during the training-evaluation process, Boeing and the FAA AEG had “discussed and agreed on [the] removal of MCAS” from the 737 MAX FSB Report and associated materials. This representation was misleading because Boeing Employee-2 had failed to disclose the “shocker alert” chat communication and the fact that the FAA AEG was deprived of relevant information about MCAS.

52. Following the Lion Air crash, Boeing proposed changes to the operational scope of MCAS, and the FAA AEG worked with Boeing to evaluate these changes to MCAS for purposes of pilot training.

## *Boeing Works to Conceal the True Cause of the Lion Air Crash*

**52a. On November 4, 2018, Boeing understood that uncommanded and erroneous MCAS had occurred on flight JT 610 when its Safety Review Board concluded the “root cause” was an “erroneous AOA input that [when] undetected may cause MCAS operation and increase crew workload.” It also knew this was an issue across all 737 MAX aircraft. (Attachment A-3, BOE\_ETH\_01679147).**

52b. In the immediate aftermath of the Lion Air crash, Boeing issued a statement: “The Boeing Company is deeply saddened by the loss of Lion Air Flight JT 610. We extend our heartfelt sympathies to the families and loved ones of those on board.” However, Boeing “shied away from taking responsibility for the MCAS issues that clearly contributed to the fatal crash of Lion Air flight 610.”<sup>4</sup>

52c. On November 6, 2018, eight days after the Lion Air crash, Boeing issued an Operations Manual Bulletin (OMB) that directed airline operators and flight crews to various flight crew procedures to address erroneous angle-of-attack (AOA) sensor data, which was—one week after the crash of the Lion Air flight—believed to be a core contributing cause of the accident. The OMB issued by Boeing had the subject line, “Uncommanded Nose Down Stabilizer Trim Due to Erroneous Angle of Attack (AOA) During Manual Flight Only.” The “reason” given for the bulletin was, “To emphasize the Procedures Provided in the Runaway Stabilizer Non-Normal Checklist (NNC).” The “Background Information” section of the OMB said: “The Indonesian National Transportation Safety Committee has indicated that Lion Air flight 610 experienced erroneous AOA data. Boeing would like to call attention to an AOA failure condition that can occur during manual flight only. This bulletin directs flight crews to existing procedures to address this condition.”<sup>5</sup>

52d. Noticeably absent from the Boeing bulletin was any reference to the “Maneuvering Characteristics Augmentation System” or “MCAS.” It did include a

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<sup>4</sup> House Committee on Transportation and Infrastructure: The Final Committee Report: The Design, Development & Certification of the Boeing 737 MAX (Sept. 2020) at 193 (“House Transportation Comm. Rep.”) available at <https://democrats-transportation.house.gov/download/20200915-final-737-max-report-for-public-release>.

<sup>5</sup> House Transportation Comm. Rep. at 192-93 (*emphasis in original OMB*).

description of the operational conditions associated with MCAS, though. “In the event of erroneous AOA data, the pitch trim system can trim the stabilizer nose down in increments lasting up to 10 seconds,” it said. “The nose down stabilizer trim movement can be stopped and reversed with the use of the electric stabilizer trim switches but may restart 5 seconds after the electric stabilizer trim switches are released. Repetitive cycles of uncommanded nose down stabilizer continue to occur unless the stabilizer trim system is deactivated through use of both STAB TRIM CUTOUT switches in accordance with the existing procedures in the Runaway Stabilizer NNC [Non-Normal Conditions].”<sup>6</sup>

52e. In a set of safety recommendations issued following the Lion Air and Ethiopian Airlines accidents, the U.S. National Transportation Safety Board observed that Boeing failed to account for the multitude of seemingly unrelated cautions and warnings, including an attention-getting stick shaker, when assessing that only four seconds would be needed for pilots to successfully respond to an erroneous MCAS activation. Moreover, a University of North Dakota researcher concluded in his dissertation in 2016 that pilots don’t regain their full cognitive abilities for 30 to 60 seconds after a “startle” event. The conspicuous omission from the Boeing OMB of information relevant to the role of the startle factor in the Lion Air accident is consistent with Boeing’s failure to establish realistic assumptions regarding the time necessary for pilots to successfully respond to an erroneous MCAS activation.<sup>7</sup>

52f. One of Boeing’s key goals for the 737 MAX program was ensuring that pilot simulator training on the MAX was not required. The Boeing OMB failed to directly alert

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<sup>6</sup> House Transportation Comm. Rep. at 194.

<sup>7</sup> House Transportation Comm. Rep. at 196.

crews to the fact that the Lion Air pilots were overcome by multiple warnings and alerts leading to confusion in the cockpit. It also did not reference MCAS.<sup>8</sup>

52g. The OMB did indicate to flight crews, however, that the AOA Disagree alert, which was a standard feature on all 737 MAX aircraft and which the FAA required to be functional on every MAX aircraft Boeing delivered, was only working on less than 20 percent of those aircraft where the Boeing customers had also purchased the optional AOA Indicator. But it did this in a subtle, nuanced way. Boeing simply wrote: “AOA DISAGREE alert (if the AOA indicator option is installed).” Even in the wake of the Lion Air crash Boeing continued to obscure information related to the 737 MAX rather than being straightforward, transparent, and complete in the data they provided.<sup>9</sup>

52h. On November 7, 2018, the day after Boeing issued its OMB, the FAA issued an Emergency Airworthiness Directive (AD) to owners and operators of the 737 MAX. The FAA Emergency AD that was issued included a list of “potential effects and indications” of erroneous AOA input that is almost identical to the list in the Boeing OMB. Specifically, it directed flight crews to comply with Runaway Stabilizer procedures if they experienced uncommanded horizontal stabilizer trim movement combined with one of the following conditions:

- Continuous or intermittent stick shaker on the affected side only.
- Minimum speed bar (red and black) on the affected side only.
- Increasing nose down control forces.
- IAS DISAGREE alert.

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<sup>8</sup> House Transportation Comm. Rep. at 195-96.

<sup>9</sup> House Transportation Comm. Rep. at 196.

- **ALT DISAGREE alert.**
- **AOA DISAGREE alert (if the option is installed).**
- **FEEL DIFF PRESS light.**
- **Autopilot may disengage.**
- **Inability to engage autopilot.**

Neither the FAA's AD nor Boeing's OMB mentioned MCAS, depriving MAX pilots of important information.<sup>10</sup>

52i. On November 27, 2018, two weeks after Boeing issued its Multi-Operator Message (MOM) alert to its 737 MAX customers, Boeing officials sat down with representatives from the Allied Pilots Association (APA), the union that represents the 15,000 pilots that fly for American Airlines at APA's headquarters in Fort Worth, Texas. American Airlines had 24 MAX airplanes in service at the time of the Lion Air crash. The tense meeting was recorded and the transcript was provided to the media and the House Transportation Committee. According to the draft transcript of that meeting, one of the Boeing officials attempted to explain away MCAS to the American Airlines pilots: "MCAS is a control law, which it's—it's in the flight control system. So it's just a little bit of software in the flight control system that is designed to change the handling characteristics of the airplane at high angles of attack." The efforts by Boeing to underplay the significance of MCAS by describing it simply as a "little bit of software" that was a "control law" within the flight computer while technically accurate, is demonstrably misleading. "Control laws" are not afterthoughts or

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<sup>10</sup> House Transportation Comm. Rep. at 198.



**unnecessary appendages of technical systems. They play pivotal roles in the function, utility, and safety of a multitude of various technologies.<sup>11</sup>**

52j. At the APA meeting, the Boeing official also suggested that regardless of the cause of stabilizer trim runaway, whether it was due to MCAS or something else, that the procedures to correct that condition were all the same. But a frustrated APA official, referring to the Lion Air pilots said, “These guys didn’t even know the damn [MCAS] system was on the airplane – These guys didn’t even know the damn system was on the airplane. ... [N]or did anybody else... that’s the problem I have.” Despite the heated exchanges, one of the Boeing officials attempted to emphasize that safety was Boeing’s number one priority:

**You've got to understand that our commitment to safety is as great as yours. It really is. And the worst thing that can ever happen is a tragedy like this, and the—and the even worse thing would be another one. So we have to do all the things we can to make sure that this never happens again, and we will, and we always do. We have that commitment to safety.**

**Fifteen weeks later, the 737 MAX suffered its second fatal crash.<sup>12</sup>**

**52k. Boeing’s failure to disclose the very existence of MCAS to MAX pilots was its most well-known omission, but there were others too. In the aftermath of the Lion Air crash, Boeing attempted to focus attention on the pilots as a central cause of the accident. However, they did not share the fact that one of Boeing’s own test pilots in late 2012 had failed to recover from uncommanded MCAS activation that led to runaway stabilizer trim in a flight simulator. While FAA guidance indicates that pilots should recognize and react to a runaway stabilizer condition in four seconds, it took the Boeing test pilot more than 10 seconds—an amount of time that could have resulted in a catastrophic outcome were it to have occurred**

<sup>11</sup> House Transportation Comm. Rep. at 203.

<sup>12</sup> House Transportation Comm. Rep. at 205.



[REDACTED]

(Attachment A-6, BOE\_ETH\_01304426 at 8-9).

52p. At that time, two instances of uncommanded and erroneous MCAS had been reported, and one resulted in a crash.<sup>14</sup> In other words, the actual data for crew response failure rate was 50%.

52q. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] (Attachment A-7, [REDACTED] at 3).

52r. [REDACTED]

[REDACTED]

[REDACTED] (Attachment A-7,

[REDACTED] at 6).

52s. [REDACTED]

[REDACTED] (Attachment

A-8, [REDACTED]). Practically, this would have resulted in pausing growth of the fleet, and perhaps would have resulted in discontinued operations of the 737 MAX.

*Boeing Continues to Conceal the Full Operational and Training Impact of MCAS from Pilots and the Public*

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<sup>14</sup> House Transportation Comm. Rep. at 8-9.

**52t. Despite its internal note regarding credit for interim action and the ongoing questions from pilots, publicly Boeing took credit with regard to the ability of pilots to respond to uncommanded and erroneous MCAS. On November 13, 2018, Muilenburg appeared on the FOX Business Network and stated Boeing had been “very transparent on providing information,” the MCAS procedure was already “part of the training manual,” and the “737 MAX is a very safe airplane.” (Attachment A-9, BOE\_ETH\_01940873).**

**52u. On November 27, 2018, Muilenburg authorized the Chief Communications Officer to offer quotes with “industry source” attribution to the media in order to “blunt input from the [Wall Street Journal] and [New York Times] who are telling us that pilots [are] asserting they are not trained to deal with MCAS.” (Attachment A-10, BOE\_ETH\_01940871). The President and Chief Executive Officer of Boeing Commercial Airplanes, General Counsel, and Vice President of Product Development were on copy.**

52v. This email was an overt act by Muilenburg in furtherance of the conspiracy to deceive the FAA. Of course, if reporting in the *Wall Street Journal* and *New York Times* could not be derailed, then that might lead to regulators, investors, and the flying public discovering what was going on.

**52w. On December 1, 2018—two days before the TARAM calculations took credit for interim mitigating action—the Ethiopian Airlines Head of Flight Operations emailed Boeing personnel with three questions from the group’s pilots about its directions to pilots in the event of uncommanded and erroneous MCAS as described in its Flight Crew Operations Manual Bulletin and subsequent Multi Operator Message. Boeing’s 737 Chief Pilot, Vice President and Chief Project Engineer of 737 Program, and Chief Engineer of 737 MAX**

Airplane Level Integration Team, with copy to its Chief Counsel, Products Liability, declined to answer two out of the three questions. (Attachment A-12, BOE\_ETH\_01398650).

52x. If Boeing had considered and responded to each of the questions raised by Ethiopian Airlines instead of refusing to answer them, the AD—and pilots’ ability to respond to the situation it described—would have been clarified, likely preventing the crash of flight ET 302 on March 10, 2019 and saving 157 lives.

52y. On December 6, 2018, Muilenburg appeared on CNBC’s Fast Money and in response to a question about pilot complaints about a lack of MCAS information, stated, “We’re in constant communication with our customers, we’re very confident that we’re providing the information that they need.... We are taking a look at that to make sure all the appropriate training is in place and the communications with our customers are there. It’s very, very important to us. But I will say, bottom line here, very important, is that the 737 MAX is safe. We’re very confident in that. We have not changed our design philosophy. These are airplanes that are handled well, in the control of the pilots. They’re designed the same way our previous 737s are, take advantage of those systems. And the proof of that, is you look around the world today, all of our customers are flying all of their MAXs daily around the world. The airplane is safe, and we’re very confident in that.... Part of what we wanted to accomplish was seamless training for our customers.” He emphasized that 737 MAX production was being ramped up, and the airplanes were oversold. (Attachment A-13).

*Boeing Assures the Public that the 737 MAX is “as Safe as Any Airplane that has Ever Flown the Skies” while Working to Remediate the “Airplane Safety Issue.”*

52z. On or about November 15, 2018, senior executives at Boeing, including Muilenburg, were informed that the SRB had identified the crew workload issue associated with unintended MCAS activation due to erroneous AOA data as an “airplane safety issue”

that required remediation, and that Boeing engineers were working on redesigning the MCAS software to address the issue. (Attachment A-11, *In the Matter of the Boeing Co., Respondent*, Release No. 11105 at ¶ 39 (Sept. 22, 2022)).

**52aa. Also, on or about November 15, 2018, Boeing’s Communications team began working with senior Boeing engineers and lawyers, among others, to draft a press release to update the public following the Lion Air Crash (the “Draft Press Release”), which would evolve to become the November 2018 Press Release. (Attachment A-11 at ¶ 40).**

52ab. Early versions of the Draft Press Release generally confirmed the plane’s safety, stating that the 737 MAX was either a “safe airplane” or that it “continue[d] to be safe to fly.” Certain versions also noted that Boeing was working with the FAA to “expedite the development and certification of a flight control software update” for MCAS. (Attachment A-11 at ¶ 41).

**52ac. During this time period, Boeing was the subject of extensive negative media coverage over allegations that Boeing had withheld information from pilots, airlines, regulators and the general public regarding MCAS. Other articles raised concerns about MCAS being too powerful and/or relying on a single sensor, and about the integrity of the certification process for the 737 MAX. (Attachment A-11 at ¶ 42).**

**52ad. Boeing's stock price was also dropping during this time. By November 20, 2018, Boeing's stock price had fallen by 11.6% since the Lion Air Crash. (Attachment A-11 at ¶ 43).**

**52ae. On November 20, 2018, Muilenburg expressed disappointment in Boeing's response to the negative post-crash media coverage, stating in an email that "[w]e are**

spending too much time playing defense... [we] need to start playing some offense.” (Attachment A-11 ¶ 44).

**52af. The next day, an official at the U.S. National Transportation Safety Board (“NTSB”) emailed Boeing a draft of the preliminary report on the Lion Air accident investigation (the “Lion Air Preliminary Report”), which was expected to be released to the public by the Indonesian government within the coming days. (Attachment A-11 at ¶ 45).**

52ag. Later that day, the Communications team sent Muilenburg and other executives an updated version of the Draft Press Release. After reviewing the draft, Muilenburg directed that the Draft Press Release be modified to incorporate a discussion of facts drawn from the Lion Air Preliminary Report, and also suggested removing discussion of the planned MCAS software redesign from the Draft Press Release. (Attachment A-11 at ¶ 46).

**52ah. On November 24, 2018, the Communications team began revising the Draft Press Release in accordance with Muilenburg's instructions. As a result, the Draft Press Release underwent significant changes as its focus shifted to the Lion Air Preliminary Report. (Attachment A-11 at ¶ 47).**

52ai. From that point forward, the Draft Press Release no longer mentioned the development of an “MCAS software update,” and also stated that Boeing’s customers and passengers “have [Boeing’s] assurance that the 737 MAX is as safe as any airplane that has ever flown the skies.” In the days that followed, Muilenburg and other executives worked with the Communications team to further revise the Draft Press Release. (Attachment A-11 at ¶ 48).

**52aj.** On the afternoon of November 27, 2018, Muilenburg approved the issuance of the November 2018 Press Release via email, writing, “Looks great – factual, and sticks to the report while making our key points. Good to go here ....” The November 2018 Press Release was published on Boeing’s website that evening, just after the public release of the Lion Air Preliminary Report by the Indonesian government. (Attachment A-11 at ¶ 49).

**52ak.** The November 2018 Press Release highlighted certain facts from the Lion Air Preliminary Report suggesting that pilot error and poor airplane maintenance by Lion Air had contributed to the crash. The November 2018 Press Release did not mention that the SRB had identified an ongoing “airplane safety issue” associated with MCAS or the planned software redesign – indeed, it did not mention MCAS at all. The final November 2018 Press Release also contained the statement: “As our customers and their passengers continue to fly the 737 MAX to hundreds of destinations around the world every day, they have our assurance that the 737 MAX is as safe as any airplane that has ever flown the skies.” (Attachment A-11 at ¶ 50).

**52al.** Prior to the issuance of the November 2018 Press Release, Boeing provided drafts to the FAA and NTSB for informational purposes, and those drafts contained the “as safe as any airplane that has ever flown the skies” language. After the November 2018 Press Release was published, a senior official at the NTSB complained to Boeing, via email, that the November 2018 Press Release was not appropriate given Boeing’s involvement in the crash investigation, and that “the omission of certain facts and the highlighting of other facts [in the November 2018 Press Release] leads the reader to Boeing’s analytical conclusion.” (Attachment A-11 at ¶ 51).



52aq. Along the same lines, on December 7, 2018, Boeing Commercial Airplane's Vice President, Product Strategy and Future Airplane Development ("VP Product Strategy") reported to Muilenburg and other senior leaders about a conversation he had with a *New York Times* reporter. The reporter had gathered that Boeing didn't mention MCAS to avoid an increased training level requirement. Sinnett insisted "MCAS presented no risk to increasing the training burden." (Attachment A-14, BOE ETH 01931754).

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differences between the NG and MAX.” The VP Product Strategy assured him Boeing was “squeaky clean.” (Attachment A-15, BOE\_ETH\_01931883).

**Boeing Continues to Pump Profits from Uninterrupted Deliveries of the 737 MAX**

52as. With uninterrupted growth of the fleet, Boeing won 5,211 orders for the 737 MAX. By the end of 2018, 330 deliveries had been made.<sup>15</sup> To be conservative, we will stop our calculation at the end of 2018, even though the conspiracy continued after that. With regard to the before-tax profit per plane, Boeing Commercial Airplanes Division reported 262 net orders during Q4 2018, valued at \$16 billion.<sup>16</sup> In Q4, Boeing received 287 total gross orders, with 248 gross 737 MAX orders.<sup>17</sup> To be conservative, assume all 25 canceled orders were MAX aircraft, resulting in 223 net MAX orders. The approximate value of these orders was \$13.6 billion, or \$61 million per aircraft. In 2018, Boeing’s operating margin was 13%—as reflected in Boeing’s Form 10-K for the year.<sup>18</sup> Using the \$61 million per aircraft valuation, Boeing’s profit per plane was \$7.9 million. Multiplying (1) and (2) together, with 330 deliveries through 2018 at a profit of \$7.9 per plane, Boeing earned \$2,607,000,000 in MAX aircraft deliveries made possible through its criminal conspiracy to defraud the FAA.

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<sup>15</sup> Boeing Orders & Deliveries Report, available at <https://www.boeing.com/commercial#orders-deliveries>.

<sup>16</sup> Id.

<sup>17</sup> Id.

<sup>18</sup>

<https://www.sec.gov/Archives/edgar/data/12927/000001292719000010/a201812dec3110k.htm/>.

52at. Boeing’s actual profit margin may have been substantially higher. Citing Moody’s, Business Insider reported profit margins for the 737 MAX of \$12-15 million per aircraft before the crash of Ethiopian Airlines flight 302.<sup>19</sup>

52au. Notably, Boeing’s stock price reached a record high on March 1, 2019—producing a “gain” to the company (and its insiders) that is not captured by the calculations above.

52av. The Commercial Airplane operating margins increased in Q4 2018 to 15.6%, in large part as a result of the 737 program. By January 2019, the 737 program was projected to be at 90% MAX aircraft.<sup>20</sup>

52aw. In light of these facts, a reasonable and conservative calculation of Boeing’s net pecuniary gain from its crime is \$2,607,000,000.

52ax. Muilenburg was compensated with \$23 million in 2018, according to Boeing’s proxy statement—on top of the \$49 million he earned during the previous two years. That is a total of \$72 million dollars, or roughly \$2 million a month. Similarly, the Chief Executive Officer of Boeing Commercial Airplanes was paid more than \$57 million during his nearly three years at the company, or roughly \$1.6 million a month.

52ay. Internally, Muilenburg knew the MCAS problem was an ongoing safety issue. On January 16, 2019, he sent his monthly business summary and competitor dashboard to the Board. He briefly updated the Board on the Lion Air accident investigation. For the first time, he acknowledged to the Board that Boeing had been working on an MCAS software

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<sup>19</sup> Business Insider, March 13, 2019, available at <https://www.businessinsider.com/boeing-737-max-profit-moodys-2019-3>.

<sup>20</sup> Q4 2018 The Boeing Company Earnings Conference Call transcript at p. 25, January 30, 2019, available at <https://investors.boeing.com/investors/events-presentations/event-details/2019/Q4-2018-The-Boeing-Company-Earnings-Conference-Call/default.aspx>

update: “While the investigation proceeds with our full support, we’re also exploring potential 737 MAX software enhancements that, if made, will further improve the safety of the systems.”<sup>21</sup> On February 13, 2019, he sent the Board the February business summary and competitor dashboard. In it, he provided a brief summary about the MCAS software fix, described euphemistically as a “software enhancement:” “we’ll continue to work closely and methodically with the [FAA] on a 737 MAX software enhancement that, when implemented, will further improve system safety.”<sup>22</sup>

52az. Meanwhile, in Q1 2019, 95 additional MAX aircraft were ordered, with another 57 deliveries made. Boeing Orders & Deliveries Report. Boeing’s stock price reached a record high on March 1, 2019.<sup>23</sup>

*Boeing’s Senior Officers are Briefed on the November 15, 2016 Chat*

52ba. In the wake of the Lion Air Crash, the DOJ began an investigation into the 737 MAX certification process. In January 2019, while collecting documents in connection with the DOJ’s investigation, members of Boeing’s Legal Department uncovered a series of communications that raised questions about the disclosures made to the FAA-AEG concerning the differences training and manuals certification, including the November 15, 2016 Chat in which Boeing Employee-1 wrote that he had “lied to regulators (unknowingly)” about MCAS. (Attachment A-16, *In the Matter of Dennis A. Muilenburg, Respondent*, Release No. 11106 at ¶ 61 (Sept. 22, 2022).

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<sup>21</sup> *In re Boeing Co. Derivative Litig.*, No. CV 2019-0907-MTZ, 2021 WL 4059934 at 44 (Del. Ch. Sept. 7, 2021).

<sup>22</sup> *Id.* at 42.

<sup>23</sup> <https://investors.boeing.com/investors/stock-information/>

**52bb. In or around January 2019, Boeing’s in-house counsel informed Muilenburg and other senior executives about the existence of the November 15, 2016 Chat. Following that communication, Muilenburg understood the November 15, 2016 Chat to be “concerning.” Muilenburg did not take any steps to learn additional details about the November 15, 2016 Chat. (Attachment A-16 at ¶ 62 ).**

**52bc. The November 15, 2016 Chat – like the documentation issues highlighted in the MCAS Certification Compliance Review report – raised significant questions concerning the adequacy of Boeing’s disclosures about MCAS in connection with the FAA-AEG’s review and approval of pilot training requirements and flight manuals for the 737 MAX, including the omission of MCAS from the differences training and the flight manuals. (Attachment A-16 at ¶ 63).**

*Ethiopian Airlines Flight 302: The Second 737 MAX Crash and the Grounding of the Fleet*

53. On March 10, 2019, Ethiopian Airlines Flight 302, a Boeing 737 MAX, crashed shortly after takeoff near Ejere, Ethiopia. All 157 passengers and crew on board died **as a direct and proximate cause of the conspiracy. (ECF No. 116 at 15, 17).** Following the Ethiopian Airlines crash, the FAA AEG learned that MCAS activated during the flight and may have played a role in the crash.

54. On March 13, 2019, the 737 MAX was officially grounded in the United States, indefinitely halting further flights of this airplane by any U.S.-based airline.

**55. Once again, looking at the ET 302 crash, accident investigators determined that the accident involved repeated unintended activations of MCAS triggered by erroneous data from an AOA sensor. (Attachment A-11 at ¶ 64).**

56. On March 13, 2019, three days after the Ethiopian Airlines Crash, the FAA issued an order grounding the entire 737 MAX fleet due to ongoing safety concerns; similar grounding orders were issued by regulators around the world. Ultimately, more than 20 months would elapse before the 737 MAX was once again permitted to fly. (Attachment A-11 at ¶ 65).

**Boeing Continues to Try to Cover Up the MCAS Problem with More False Statements**

57. The extensive negative media coverage of Boeing that followed the Lion Air Crash intensified after the Ethiopian Airlines Crash and the subsequent grounding, as did the downward pressure on Boeing's stock price. (Attachment A-11 at ¶ 66).

58. Boeing's first quarter earnings call occurred on April 24, 2019. On that call, Muilenburg, on behalf of Boeing, responded to analysts' questions concerning MCAS and the certification process for the 737 MAX. During the questioning, one analyst asked in relevant part: "how did this slip through the engineering organization? How did it slip through the FAA... because it doesn't seem like there was a lot of new science going on here... [t]his seemed to be applications of existing technology to an existing platform." Muilenburg's answer stated in relevant part:

[T]here is no technical slip or gap here... we know that both accidents were a series of events... in this case, there was erroneous angle-of-attack information that came into the airplane from multiple causes... at some point during the flight, that activated the MCAS control laws, and we know that ultimately there were actions or actions not taken that contributed to the final outcome...

But I can tell you with confidence that we understand our airplane, we understand how the design was accomplished, how the certification was accomplished, and remain fully confident in the product that we've put in the field. But we also know there are areas that we can improve, and that is the source of the software update here. But there was no surprise or gap or unknown here or something that somehow slipped through a certification process. Quite the opposite. We know exactly how the airplane was designed. We know exactly how it was certified. We have taken the time to understand that....

(Attachment A-11 at ¶ 67) (Emphasis added.)

59. Five days later, on April 29, during a press conference following Boeing's annual shareholders' meeting, a reporter asked Muilenburg whether the MCAS design was deeply flawed. Muilenburg, on behalf of Boeing, responded in relevant part: "We have gone back and confirmed again ... that we followed exactly the steps in our design and certification processes that consistently produce safe airplanes. It was designed per our standards. It was certified per our standards." (Attachment A-11 at ¶ 68) (Emphasis added.)

60. The April 2019 Statements were misleading under the circumstances absent any discussion of the questions raised by the discovery of the November 15, 2016 Chat and the MCAS Certification Compliance Review concerning the adequacy of Boeing's disclosures to the FAA-AEG in connection with the FAA-AEG's review and approval of pilot training requirements and flight manuals for the 737 MAX. (Attachment A-11 at ¶ 69).

*Boeing's Delays Its Cooperation with Justice Department's Investigation*

61. Once Boeing was made aware of the Justice Department's Fraud Section's criminal investigation into the circumstances surrounding the 737 MAX and MCAS, Boeing delayed its cooperation with that investigation and only began cooperating after the first six months of the Fraud Section's investigation. During those six months, the Company's response frustrated the Fraud Section's investigation. (ECF No. 4 at ¶ 4(c)).

*Boeing's Culpability for Its Crime*

62. Boeing is a large U.S. corporation with more than 5,000 employees. With corporate offices near Washington, D.C., Boeing employs more than 170,000 people across the United States and in more than 65 countries.<sup>24</sup>

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<sup>24</sup> <https://www.boeing.com/company/general-info#overview>.

63. Muilenburg was Boeing’s CEO from July 2015 until December 2019, when he stepped down in the wake of the two Boeing 737 MAX crashes.<sup>25</sup> As the CEO of Boeing, Muilenburg was obviously a “high-level person” at Boeing within the meaning of the applicable U.S. Sentencing Guidelines. *See* U.S.S.G. § 8C2.5 App. Note 3.<sup>26</sup>

64. Muilenburg participated in Boeing’s conspiracy. As alleged in the criminal information, the purpose of Boeing’s criminal conspiracy was “impairing, obstructing, defeating, and interfering with, by dishonest means, the lawful function of a United States government agency, to wit, the Federal Aviation Administration Aircraft Evaluation Group (“FAA AEG”) within the United States Department of Transportation, in connection with the FAA AEG’s evaluation of the Boeing 737 MAX airplane’s Maneuvering Characteristics Augmentation System (“MCAS”), including for purposes of the 737 MAX Flight Standardization Board Report (“FSB Report”) and the 737 MAX differences-training determination.”<sup>27</sup> Muilenburg, together with the Boeing Company, knowingly committed and caused to be committed at least one overt act in furtherance of the conspiracy, including the acts alleged in ¶¶ 52l-52n, 52t-52v, 52y-52ar, 52ax-52ay, 57-61.

65. Muilenburg also condoned Boeing’s conspiracy, by failing to take reasonable steps to terminate the conspiracy, as established by the acts alleged in ¶¶ 52l-52n, 52t-52v, 52y-52ar, 52ax-52ay, 57-61. Under the Sentencing Guidelines, “An individual ‘condoned’ an offense if the individual knew of the offense and did not take reasonable steps to prevent or terminate the offense.” U.S.S.G. § 8A1.1, App. Note 3.

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<sup>25</sup> [https://en.wikipedia.org/wiki/Dennis\\_Muilenburg](https://en.wikipedia.org/wiki/Dennis_Muilenburg).

<sup>26</sup> In this statement of facts, all references to the Guidelines are to the 2018 edition applicable here.

<sup>27</sup> ECF No. 1 at 1



66. At the very least, Muilenburg was “willfully ignorant” of Boeing’s conspiracy (although the better understanding of the evidence is that he participated in the conspiracy). Under U.S.S.G. 8A1.2, Application Note 3, an individual was “willfully ignorant of the offense” if the individual did not investigate the possible occurrence of unlawful conduct despite knowledge of circumstances that would lead a reasonable person to investigate whether unlawful conduct had occurred.” As an example of willful ignorance, as recounted in paragraphs ¶¶ 52bb-52bc above, Muilenburg did not take any steps to investigate the November 15, 2016 Chats from co-conspirator Boeing Employee-1, despite understanding the chat to be “concerning.” (Attachment A-16 at ¶ 62).

67. As a large, publicly traded corporation, Boeing has the ability to pay a substantial fine. According to one reliable estimate, Boeing has a market capitalization of \$113.83 billion, making it the world’s 131st most valuable company.<sup>28</sup>

*The Pecuniary Loss Caused by Boeing’s Conspiracy*

68. Boeing’s conspiracy directly and proximately caused the deaths of 346 passengers and crew on board Lion Air Flight 610 and Ethiopian Airlines Flight 302.<sup>29</sup>

69. Had Boeing not committed its crime, the FAA AEG would have required Level D differences training for operators of the 737 MAX and would have included information related to MCAS in relevant training materials. As a result, foreign regulators—including Indonesian and Ethiopian authorities—would have issued similar training certifications and instructional materials, having taken their cue from the world’s leading authority on aviation standards, the FAA. And ultimately, foreign operators of the 737 MAX—including the pilots

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<sup>28</sup> <https://companiesmarketcap.com/boeing/marketcap/>.

<sup>29</sup> ECF No. 116 at 15-19.

on Lion Air Flight 610 and Ethiopian Airlines Flight 302—would have received training adequate to respond to the MCAS activation that occurred on both aircraft.<sup>30</sup>

70. The two airplane crashes were a direct and reasonably foreseeable consequence of Boeing's scheme to defraud federal aviation regulators.<sup>31</sup>

71. Boeing's conspiracy crime and the resulting harm of the two crashes are substantially related enough that the accidents cannot be described as a mere fortuitous result.<sup>32</sup>

72. The tragic loss of life that resulted from the two airplane crashes was a direct and reasonably foreseeable consequence of Boeing's conspiracy to defraud the United States.<sup>33</sup>

73. **Boeing's conspiracy crime resulted in ten or more victims of that particular crime.**<sup>34</sup>

74. Boeing's conspiracy crime involved a foreseeable risk of death. Boeing's employees recognized a general risk that lying to the FAA-AEG in the course of training certification discussions might cause. Clearly, the general risk created by a pilot's lack of training is a potential catastrophic event, like the two crashes that occurred here.<sup>35</sup>

75. **Boeing’s conspiracy crime caused horrendous losses to the victims’ families, as Boeing has admitted. During a June 18, 2024, Senate hearing on “Boeing’s Broken Safety Culture,” Boeing’s current CEO, Dave Calhoun, told the families: “I would like to apologize**

<sup>30</sup> ECF No. 116 at 15-16.

<sup>31</sup> **Id. at 16.**

32 **Id.**

<sup>33</sup> **Id. at 17.**

<sup>34</sup> **Id.** at 16.

<sup>35</sup> **Id.** at 17.

on behalf of all of our Boeing associates spread throughout the world, past, and present, for your losses. They are gut-wrenching. And I apologize for the grief that we have caused .... And so, again, I'm sorry.”<sup>36</sup>

76. The “gut-wrenching” losses that Boeing’s conspiracy crime caused to the victims’ families can be quantified so as to measure the pecuniary losses Boeing caused. For example, as a reasonable and conservative estimate, it would be possible to rely on a 2010 article by Professor Matt DeLisi and his colleagues, which calculated “cost estimates” for the crime of murder (the most intentional form of crimes causing death).<sup>37</sup> They concluded that the cost, in 2008 U.S. dollars, was \$4,712,769.<sup>38</sup> Translated into 2018 dollars, the cost of a homicide would be \$5,496,483. The same “cost estimate” for a death caused by an intentional murder would, by definition, equal the cost estimate for a death directly and proximately caused by an intentional conspiracy to defraud the FAA. Multiplied across 346 crime victims, the total loss to victims from Boeing’s crime in 2018 dollars is \$1,901,783,118. There are also other reasonable ways of calculating the loss that Boeing’s conspiracy crime caused to the victims’ families. In addition to the pecuniary losses described in this paragraph, Boeing’s conspiracy crime also imposed very significant non-pecuniary losses on the victims and the victims’ families, such as pain and suffering and emotional distress.

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<sup>36</sup> <https://www.hsgac.senate.gov/subcommittees/investigations/hearings/boeings-broken-safety-culture-ceo-dave-calhoun-testifies>

<sup>37</sup> See Matt DeLisi et al., Murder by Numbers: Monetary Costs Imposed by a Sample of Homicide Offenders, 21 J. Forensic Psychiatry & Psych. 501, 506 (2010).

<sup>38</sup> Id. at 506 tbl. 1

77. Boeing's conspiracy crime produced two crashes in a few months of two new Boeing 737 MAX aircraft.<sup>39</sup> Those two crashes, in turn, directly and proximately produced worldwide grounding orders by domestic and foreign regulatory authorities.<sup>40</sup>

78. Shortly after Boeing disclosed to the FAA information showing that the traces from the Lion Air crash and the Ethiopian Airlines crash showed striking similarities, the FAA grounded the 737 MAX fleet in the United States.<sup>41</sup>

79. After the FAA grounded the 737 MAX, foreign grounding orders swiftly followed (in those countries which had not already grounded the MAX). As Boeing has admitted, "FAA is pretty powerful and most countries defer to what the FAA does[.]"<sup>42</sup> Boeing's crime was thus a but-for cause of these grounding orders.

80. That the FAA would ground the MAX was a foreseeable consequence of the two crashes. The FAA Administrator promotes the safe flight of civil aircraft by, among other things, prescribing minimum standards for practices, methods, and procedures the Administrator finds necessary for safety in air commerce.<sup>43</sup> The FAA Administrator is authorized to take necessary and appropriate actions to carry out his aviation safety duties and powers under part A ("Air Commerce and Safety") of subtitle VII of Title 49 of the United States Code, including conducting investigations, issuing orders, and prescribing regulations, standards, and procedures.<sup>44</sup> When the Administrator determines that an

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<sup>39</sup> ECF No. 116 at 16-19.

<sup>40</sup> See House Transportation Committee Report, *supra*, at 219-21.

<sup>41</sup> *Id.* at 220-21.

<sup>42</sup> ECF No. 116 at 17 (citing sources).

<sup>43</sup> 49 U.S.C. § 44701(a)(5).

<sup>44</sup> 49 U.S.C. § 40113(a).

emergency exists related to safety in air commerce and requires immediate action, the Administrator may issue immediately effective orders to meet the emergency.<sup>45</sup>

81. The facts recounted in the previous paragraph about FAA grounding authority were well known to Boeing. Indeed, after briefing the FAA about the similarities between the Lion Air and Ethiopian Airlines crashes, Boeing asked the FAA “what are you going to do?”<sup>46</sup> This demonstrates that Boeing knew that grounding was a possible outcome of the two crashes.

82. Groundings from the 737 MAX crashes directly and foreseeably produced losses to Boeing’s aircraft customers. Boeing reported 737 MAX customer loss considerations of \$9,257,000,000.<sup>47</sup> In 2019 customer loss considerations was an estimated \$8.259 billion, net of \$500 million paid by insurance companies. The insurance companies lost \$500 million as a result of these payments. In 2020, customer loss considerations were an estimated \$498 million. 737 MAX “customer considerations” reflect the estimated “concessions and other considerations to customers for disruptions related to the 737 MAX grounding and associated delivery delays.”<sup>48</sup>

### **Boeing’s Breaches Its DPA Obligations**

83. Boeing entered into a DPA with the Justice Department to resolve a criminal charge of conspiracy on around January 7, 2021. During the three-year term of its DPA,

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<sup>45</sup> 49 U.S.C. 46105(c).

<sup>46</sup> House Transportation Comm. Report, *supra*, at 220.

<sup>47</sup> See Boeing Form 10-K available at <https://d18rn0p25nwr6d.cloudfront.net/CIK-0000012927/31b93a2e-c565-4279-9806-69750eaa5361.pdf> via <https://investors.boeing.com/investors/reports/>.

<sup>48</sup> Boeing to Recognize Charge and Increased Costs in Second Quarter Due to 737 MAX Grounding, July 18, 2019, available at <https://boeing.mediaroom.com/2019-07-18-Boeing-to-Recognize-Charge-and-Increased-Costs-in-Second-Quarter-Due-to-737-MAX-Grounding>

• Boeing failed to fully satisfy the requirement to “create and foster a culture of ethics and compliance with the law in its day-to-day operations,” Attachment C ¶ 1, by failing to mitigate known manufacturing and quality risks;

- Boeing failed to fully satisfy the requirement to implement “compliance policies and procedures designed to reduce the prospect of violations of U.S. fraud laws and the Company’s compliance code,” Attachment C ¶ 3, by failing to implement sufficient controls concerning the risk that Boeing’s airworthiness certifications to the FAA could be incomplete, inaccurate, false and/or fraudulent;

• Boeing failed to fully satisfy the requirement to appropriately develop and adjust “compliance policies and procedures on the basis of a periodic risk assessment addressing the individual circumstances of the Company,” Attachment C ¶ 4, and to review and update such policies “as appropriate to

**ensure their continued effectiveness,” Attachment C ¶ 5, in light of known manufacturing and quality risks, and the attendant risks of incomplete, inaccurate, false, and/or fraudulent statements to the FAA.**

**Proposed Plea Agreement, Breach Determination (ECF No. 221-1, p. A-1-3, at ¶ 6).**

85. Boeing's breaches of the DPA recounted in the previous two paragraphs came during a three-year period of time when it was being monitored by the Justice Department, including monitoring of quarterly reports being provided by Boeing. DPA, Enhanced Reporting Requirements, at ¶ 12. The Justice Department's monitoring was insufficient to detect Boeing's numerous and substantial breaches of the DPA.

\* \* \*

The families believe that they can establish each and every one of the foregoing facts. The families request that, if the parties dispute any of these facts, that they specifically identify the fact disputed, the basis for the dispute, and evidence supporting that basis. The families' counsel are also available to meet-and-confer, on reasonable notice, with the parties to attempt to resolve any factual disputes that may arise and to attempt to narrow the range of any disagreement between the parties.

**ATTACHMENT A -1**  
**(BOE\_ETH\_01706114)**



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6-FEB-2020 14:33:39

37MAXFCI-PDR\_AI22

## Item Header:

Title: MCAS/Speed Trim

Primary Resp Person: [REDACTED]

Secondary Resp Person: [REDACTED]

Fix Need Date: 01-JUL-2013

ECD:

Phase: CLOSED Item is resolved, no further action required

Model: 737 MAX -8

Information Last Modified: 27-JUN-2013 10:46:49 US(Pacific)

## Item Progress:

Date	Resp Person	Type	Attachments	Last Updt (USPac)
21-MAY-2013	[REDACTED]	ORIG	N	24-MAY-2013 08:38:21

Problem Statement: Every new buzzword represents a company and airline cost via changed manuals, changed training, changed maintenance manuals.

Recommended Action: Investigate deletion of MCAS nomenclature and cover under the umbrella of 'revised speed trim'.

07-JUN-2013	[REDACTED]	ANALYSIS	N	07-JUN-2013 08:29:23
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## 6/7/13 Meeting Minutes:

- 1) GTTA left the name as MCAS but treated as analogous function as a speed trim type function.
- 2) If we emphasize MCAS is a new function there may be a greater certification and training impact.
- 3) Treat as an addition to Speed Trim.
- 4) Externally we would communicate it is an addition to Speed Trim.
- 5) Internally continue using the acronym MCAS (within variable names etc).
- 6) Work with AR on certification perspective to ensure this strategy is acceptable.
- 7) Make sure EASA Fam Tech presentation is consistent with intent that MCAS is an addition to Speed Trim.

07-JUN-2013	[REDACTED]	PROP_RES	N	21-JUN-2013 09:25:42
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After speaking with the Autoflight AR, concurrence was provided that we can continue to use the MCAS nomenclature internally (variable names, etc) while still considering MCAS to be an addition to the Speed Trim function. This will allow us to maintain the MCAS nomenclature while not driving additional work due to training impacts and maintenance manuals.

27-JUN-2013	[REDACTED]	PROP_RES	N	27-JUN-2013 10:37:24
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Accepting team analysis on keeping MCAS nomenclature. Item can be closed.

27-JUN-2013	[REDACTED]	CLOSURE	N	27-JUN-2013 10:46:49
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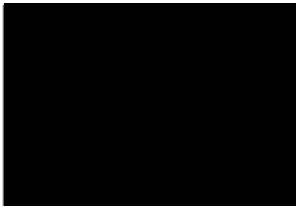
Action Item is complete and is closed.

## Cross Reference:

ENTER WITNESS NAME

**EXHIBIT****015**

ENTER DATE

Code	Item Type	Ref Item ID	Version
PRG_NTFY	PERSON		
PRG_NTFY	PERSON		
ONE_NTFY	PERSON		
PRG_NTFY	PERSON		
PRG_NTFY	PERSON		
CHG_NTFY	PERSON		
ONE_NTFY	PERSON		

**ATTACHMENT A -2**  
**(BOE\_ETH\_00425950)**

**From:** [REDACTED]  
**To:** [REDACTED]  
**Sent:** 5/31/2013 1:04:16 PM  
**Subject:** Conversation with [REDACTED]

[REDACTED] [12:35 PM]:

Hi [REDACTED]  
Is the meeting still on?

[REDACTED] [12:36 PM]:

Hi [REDACTED] the meeting ended up being shorter than expected, we ended it already.

[REDACTED] [12:36 PM]:

ahh!  
12 to 12:30  
Ha, I thought it was 12:30 to 1  
There was no way I could have made 12:00  
I could have told you earlier ... very sorry about missing it

[REDACTED] [12:37 PM]:

No worries at all, hopefully your DTPs are going/went well.

[REDACTED] [12:37 PM]:

Yes! Very well now. Want me to swing by this afternoon to see what i missed?

[REDACTED] [12:40 PM]:

The outcome was pretty minimal. The action was passed to [REDACTED] who will be reviewing MCAS from a cert aspect to see if there are any issues re-branding it as an addendum to the speed trim system. Other than that there were no issues brought up with pursuing a change to the name in order to minimize the impact on documentation.

[REDACTED] [12:40 PM]:

ok thanks

[REDACTED] [12:45 PM]:

Do you see any issues with considering MCAS as an addendum to the speed trim system, besides possible certification complications which [REDACTED] is currently looking into.

[REDACTED] [12:46 PM]:

Would we have to change all of the variable names from MCAS to something else? Because that was a bit of an effort for [REDACTED] the first time.

What was the reason behind wanting to change MCAS to under the speedtrim region?

[REDACTED] [12:52 PM]:

Thats a great question about the variable names. I can ask [REDACTED] on his thoughts. The reason for changing MCAS to something under the speed trim name was to reduce extra Company and Airlines costs by requiring less changes to manuals, training, and maintenance manuals.

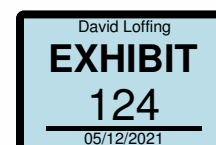
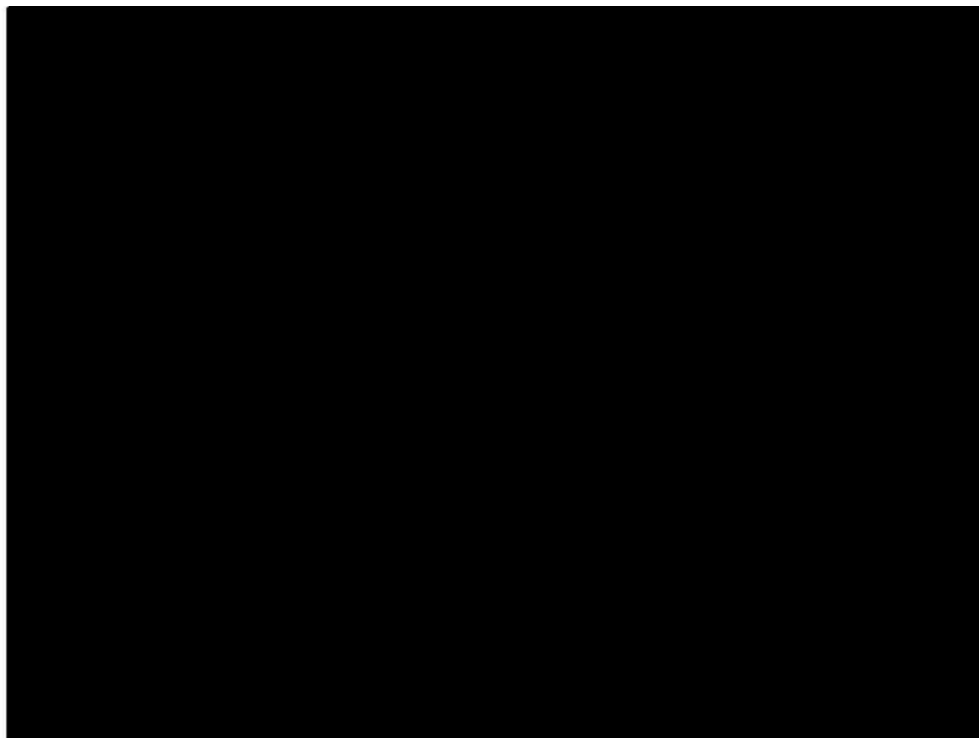
ENTER WITNESS NAME

**EXHIBIT**

**005**

ENTER DATE

**ATTACHMENT A -3**  
**(BOE\_ETH\_01679147)**



BOEING PROPRIETARY | 1



BOEING		Safety Review Board	
COSP Title: Erroneous AoA (Angle of Attack) Data Results in High Crew Workload			
Event Airplane Information:	LN7058	~800 Flight Hours	~400 Flight Cycles
Background:			
<ul style="list-style-type: none"><li>• MCAS (Maneuvering Characteristics Augmentation System) implemented on 737MAX to address pitch up tendencies at high angles of attack near stall conditions</li><li>• Single undetected AOA failure (high) can result in MCAS application of stabilizer nose down trim to the MCAS commanded limit from initial stab position</li><li>• Wheel/column trim switch resets MCAS</li><li>• Five seconds after last manual trim MCAS reasserts nose down trim if high AoA still present</li><li>• Pilots are able to use column trim switch to override MCAS input; which also resets MCAS</li><li>• Crew response for perceived stabilizer runaway is to activate aisle stand Stab Cutout Switch per Runaway Stabilizer NNC</li><li>• Subsequent repeated cycles of MCAS trim that are not fully reset via manual trim can exceed column authority</li><li>• Potential airplane effects that may increase workload that can complicate crew response :<ul style="list-style-type: none"><li>• Stick shaker activation</li><li>• Activation of Elevator Feel Shift (increased column feel forces)</li><li>• IAS DISAGREE message may appear on the PFD Speed Tape</li></ul></li></ul>			
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## Safety Review Board

### MCAS Overview

The larger diameter 737MAX engines degrade a marginal pitch-up handling characteristic of the 737MAX wing at high angle of attack.

Maneuvering Characteristics Augmentation System (MCAS) commands nose down stabilizer to augment the unsatisfactory pitch-up handling characteristics.

MCAS was implemented to improve the stick force gradient sufficiently to meet the requirements as shown in Figure 1.

Originally implemented for wind up turns. MCAS was expanded during the 737-8 flight test program to improve stall characteristics and identification during level flight.

The core MCAS control law was developed for the GTTA tanker program.

MCAS is activated without pilot input and only operates in manual, flaps up flight

#### Mach limits

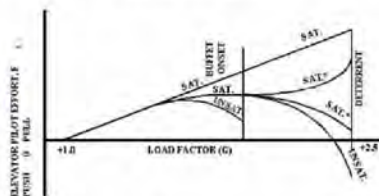
- $0.20 \leq \text{Mach} \leq 0.84$

AOA trigger is a function of Mach

Nose Down Stabilizer is a function of Mach & Delta AOA

- Maximum authority set at up to 2.5 deg
- Stabilizer rate = 0.27 deg/sec

Figure 1. (AC 25-7C Figure 33-1)




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Safety Review Board

System Description / Operation:


**Implementation of MCAS**

- MCAS function commands nose down incremental stabilizer deflection
- Triggered by AoA exceeding identified threshold
- Nose down stabilizer deflection limited to no greater than 2.5 degrees per MCAS activation
- MCAS is hosted in both FCCs.
  - Active Flight Control Computer (FCC) toggles for each flight.
  - Defaults to left FCC after power up, then alternates by flight.
  - Active FCC not affected by Flight Director switches or MCP master lights.
- MCAS uses AoA vane associated with the active FCC.
- MCAS bypasses column cutout function to allow ND stabilizer during NU column.
- Pilot manual trim or stabilizer aislestand cutout switches will override MCAS

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**Safety Review Board**


Root Cause:

- *An erroneous AOA input that is undetected may cause MCAS operation and increase crew workload*
- *Electrical failures might be another means of erroneous input.*

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**Safety Review Board**

Scope:

- 737MAX airplanes in the fleet
- 737MAX deliveries and 737-7 ATC
- *Note: MCAS has been incorporated on the 767 GTTA and USAF Tanker.*
- 767 air data system architecture includes a comparison monitor for angle of attack data
- With a failure of a DADC (digital air data computer) source, it could down select to single source of data. If both sources are valid but very different in value, then the comparison monitor would set a fault and go to default value.

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**BOEING** Safety Review Board


**Airplane Models Affected by the Potential Safety Issue:**

Airplane Type/Model *	Model Affected by Issue?		Rationale (provide rationale for each airplane type/model)
	Yes	No	
707 / 727		X	
737-200/300/400/500		X	
737-600/700/800/900/BBJ		X	
737-7/8/9	X		
747-100/200/300/SP		X	
747-400		X	
747-8		X	
757		X	
767		X	767 GTTA/USAF Tanker utilizes an AoA comparison monitor
777		X	
787		X	
717		X	
DC-8		X	
DC-9 / MD-80 / MD-90		X	
DC-10 / MD-10		X	
MD-11		X	
Other			

\* Applicability evaluation is intended to consider all relevant Boeing design approvals. This includes all Type Certificated models, TC'd military derivatives, minor models not listed, Boeing-held STCs, Boeing Service Bulletin modifications, etc. Applicability is NOT meant to include new designs prior to Type Certification or non-TC'd military designs (ref: [REDACTED]).

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**BOEING**

Safety Review Board

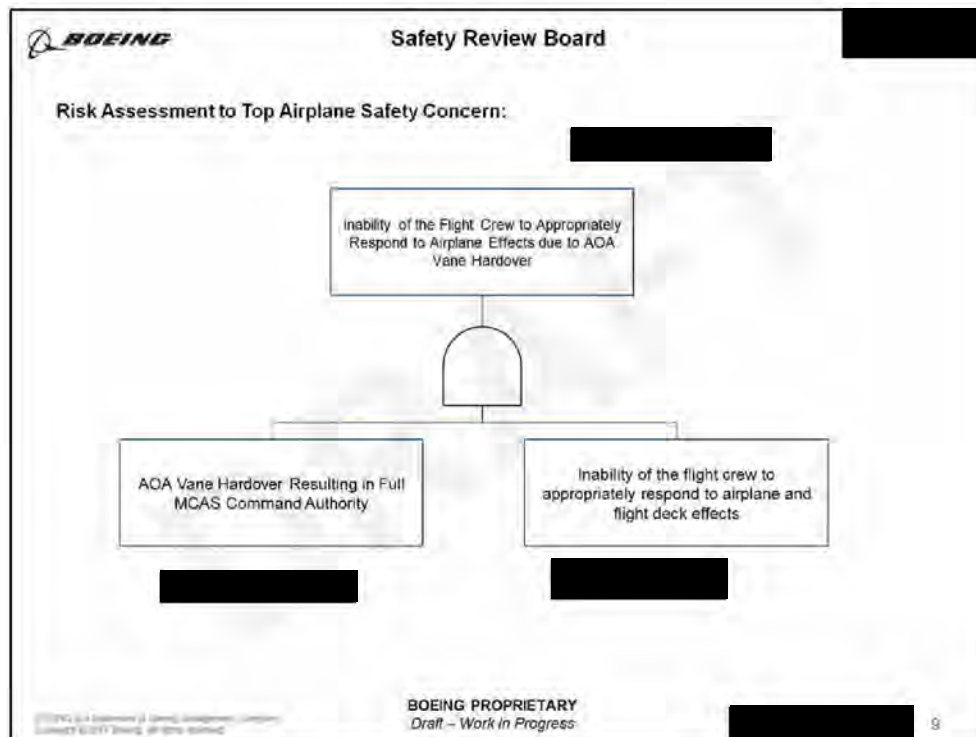
Potential Airplane and/or Personal Safety Effects (Hazard Assessment):

- *Repeated activations of MCAS followed by repeated insufficient manual trim back to neutral column force may ultimately result in insufficient column authority to oppose stabilizer movement without appropriate pilot action*
- *Multiple, and potentially conflicting, failure indications may lead to pilot confusion, which could delay appropriate pilot response*

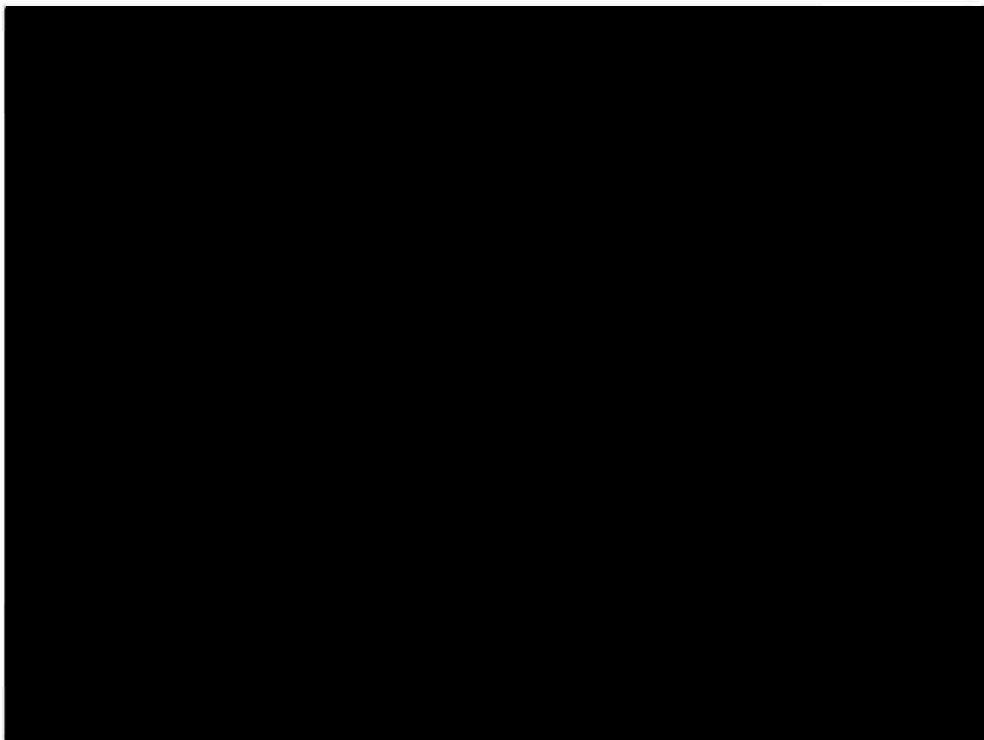
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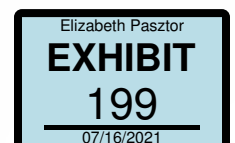




**ATTACHMENT A -4**  
**(BOE\_ETH\_M00001124 –**  
**BOE\_ETH\_M00001125)**



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Carved	
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Tag Note	
Source Extraction	Logical (1)
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Manually decoded	
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**ATTACHMENT A -6**  
**(BOE\_ETH\_01304426)**

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BOE\_ETH\_01304426

<b>COSP Title:</b>	Erroneous AoA (Angle of Attack) Data Results in High Crew Workload		
<b>Event Airplane Information:</b>	<b>LN7058</b>	<b>~800 FH</b>	<b>~400 FC</b>

## Background:

- **MCAS (Maneuvering Characteristics Augmentation System) implemented on 737MAX to address pitch up tendencies at high angles of attack near stall conditions**
- **Single undetected AOA failure (high) can result in MCAS application of stabilizer nose down trim to the MCAS commanded limit from initial stab position**
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- **Five seconds after last manual trim MCAS reasserts nose down trim if high AoA still present**
- **Pilots are able to use column trim switch to override MCAS input; which also resets MCAS**
- **Crew response for perceived stabilizer runaway is to activate aisle stand Stab Cutout Switch per Runaway Stabilizer NNC**
- **Subsequent repeated cycles of MCAS trim that are not fully reset via manual trim can exceed column authority**
- **Potential airplane effects that may increase workload that can complicate crew response :**
  - **Stick shaker activation**
  - **Activation of Elevator Feel Shift (increased column feel forces)**
  - **IAS DISAGREE message may appear on the PFD Speed Tape**



# MCAS Overview

The larger diameter 737MAX engines degrade a marginal pitch-up handling characteristic of the 737MAX wing at high angle of attack.

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MCAS is activated without pilot input and only operates in manual, flaps up flight

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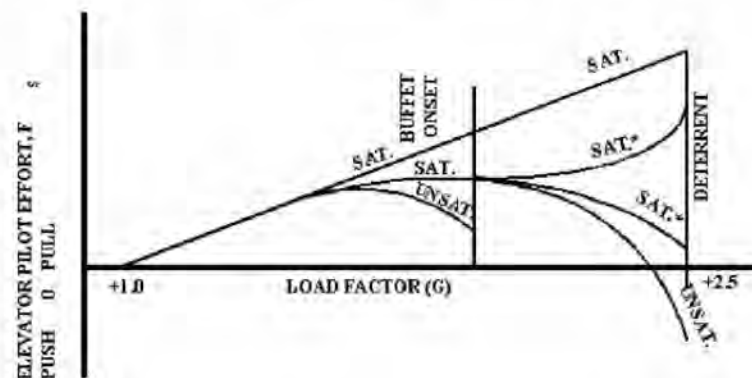
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Nose Down Stabilizer is a function of Mach & Delta AOA

- Maximum authority set at up to 2.5 deg
- Stabilizer rate = 0.27 deg/sec

Figure 1. (AC 25-7C Figure 31-1)



## System Description / Operation:

### Implementation of MCAS

- MCAS function commands nose down incremental stabilizer deflection
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- MCAS uses AoA vane associated with the active FCC.
- MCAS bypasses column cutout function to allow ND stabilizer during NU column.
- Pilot manual trim or stabilizer aislestand cutout switches will override MCAS

**Root Cause:**

- ***An erroneous AOA input that is undetected may cause MCAS operation and increase crew workload***
- ***Electrical failures might be another means of erroneous input.***



**Scope:**

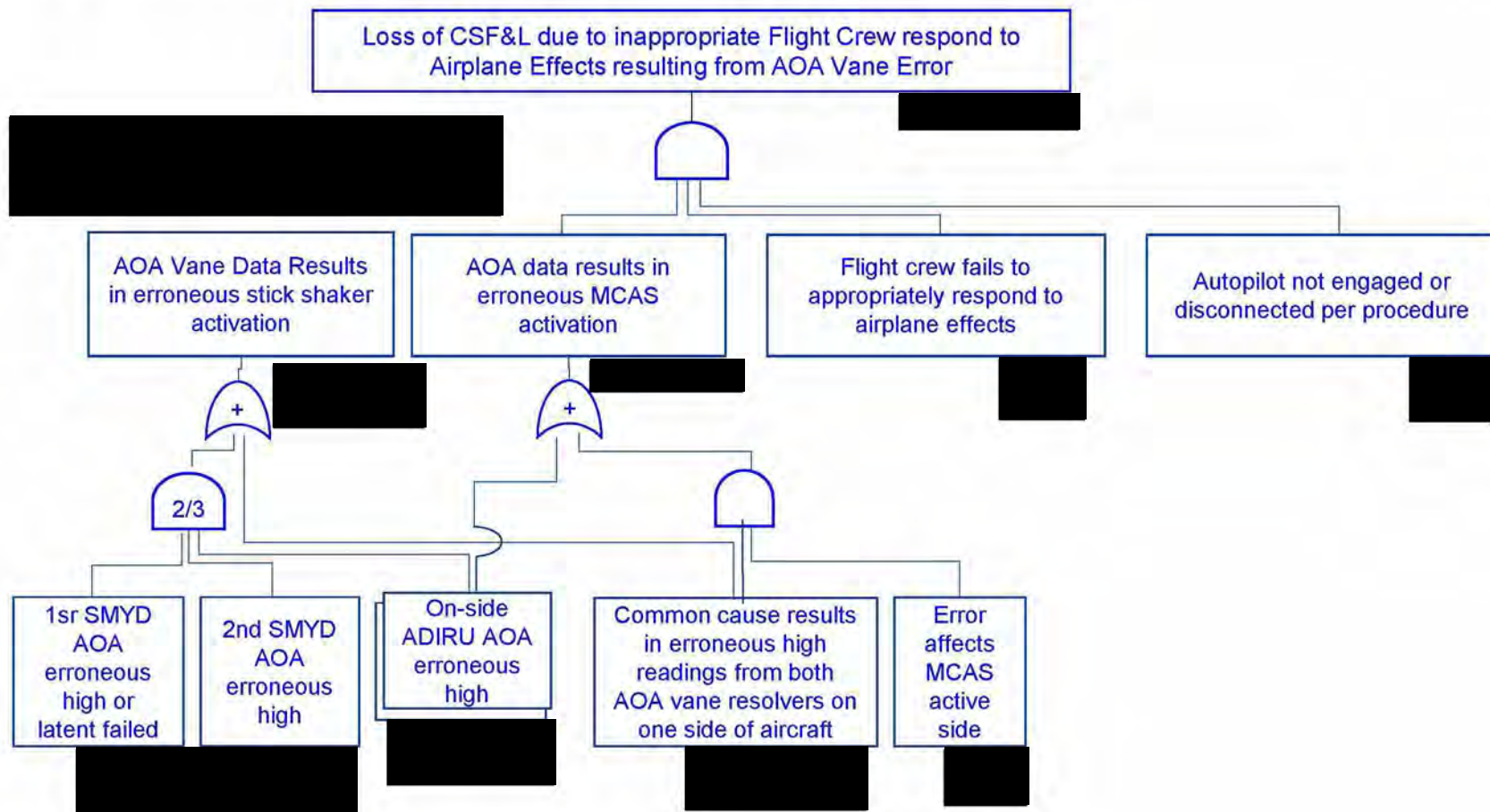
- **737MAX airplanes in the fleet**
- **737MAX deliveries and 737-7 ATC**
- **Note: MCAS has been incorporated on the 767 GTTA and USAF Tanker.**
  - **767 air data system architecture includes a comparison monitor for angle of attack data**
  - **With a failure of a DADC (digital air data computer) source, it could down select to single source of data. If both sources are valid but very different in value, then the comparison monitor would set a fault and go to default value.**

## Airplane Models Affected by the Potential Safety Issue:

Airplane Type/Model *	Model Affected by Issue?		Rationale  (provide rationale for each airplane type/model)
	Yes	No	
707 / 727		X	
737-200/300/400/500		X	
737-600/700/800/900/BBJ		X	
737-7/8/9	X		
747-100/200/300/SP		X	
747-400		X	
747-8		X	
757		X	
767		X	767 GTTA/USAF Tanker utilizes an AoA comparison monitor
777		X	
787		X	
717		X	
DC-8		X	
DC-9 / MD-80 / MD-90		X	
DC-10 / MD-10		X	
MD-11		X	
Other			

\* Applicability evaluation is intended to consider all relevant Boeing design approvals. This includes all Type Certificated models, TC'd military derivatives, minor models not listed, Boeing-held STCs, Boeing Service Bulletin modifications, etc. Applicability is NOT meant to include new designs prior to Type Certification, or non-TC'd military designs.

## Risk Assessment to Top Airplane Safety Concern:

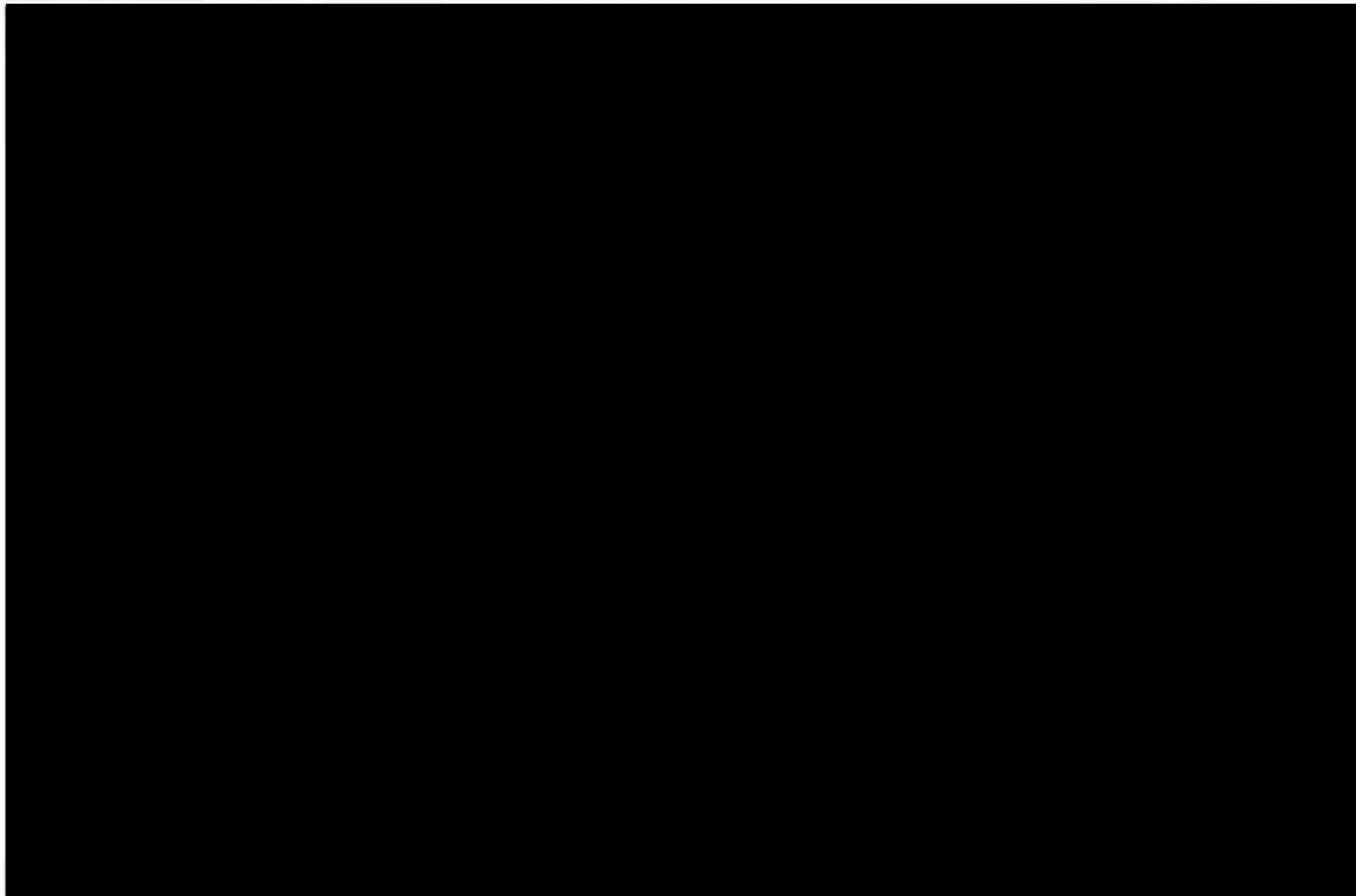




## Safety Review Board

Enclosure 10-24-18-14-00  
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Case 1:19-cv-02170 Document 26-1 Filed 10/24/19 Page 128 of 268



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BOE\_ETH\_01304434



## NG Maintenance Logs used for Fault Tree Calculation (page 1 of 2)

DISC_CMPLNT_DT	DISC_CMPLNT_TX
24-Dec-15	DURING CLIMEBOUT SPD LIM CAUTION LT CAME ON CAPT'SADI DISPLAY , PICH BAR DISAPPEARED AND LOW SPPED BAR DISAPPERED. INTERMITTENT STICK SHAKER DURING LEVEL FLT AT FL360 AIRSPEEDAWRAL INDICAT ION ON APRROACH.
22-Jan-16	CA SIDE ONLY SPD LIM LIGHT PLI STALL WARNING STICK SHAKER THEN WITH FLAPS EXTANDIED NO MIM SPEED INGO APPEARS NO 1 STALL SYSTEM COMPUTION MALFUNCTION.
31-Jan-16	DURING FLIGHT ON RECALL OCCASIONS STICK SHAKER WOULD COME ON AND CAPT SPEED TAPE WENT ALL RED + BLACK
10-Mar-16	MULTIPLE LARGE BIRD STRIKE LOSS OFF AIRSPEED IND. ON F/O SIDE
23-Apr-16	DURING APPROACH STALL WARNING L SIDE SOUNDED - SPEED 210KT CLEAR CONFIGURATION
09-Jun-16	THE CREW REPORT THAT THE STALL SPEED HAVE SOME PROBLEM.
21-Aug-16	ON FINAL APROACH, AOA (ANGLE OF ATTACCK INDICATION ON PFD). SPEED TAPE LEFT A5 KT MORE THAN RIGHT. FAULT CODE: 342 151 00
23-Jan-17	BIRD STRIKE DURING APP ON SDU AIRPORT, WITH AOA DISAGRE, AIRSPEED DISAGRE, ALT DISAGRE, ALERT ON PFD, ALPHA VENE, YAW DAMPER LIGHT ON AND STICK SHAKER AN OVERSPEED.
22-Jun-17	FLT CREW REPORT - AS PER PREV REPORT MIN SPEED DISPLAYED ON F/'S PFD HIGHER THAN EXPECTED AND COMPARED WITH CAPT DISPLAY - APPROX 15-20 KTS HIGHER.
27-Dec-17	TECH SUPPORT UPDATE ON CHRONIC STICK SHAKER ISSUES PLZ PERFORM CDS BITE PER FIM 31-62-T801 FOR ANY FAULTS ALSO LOOK AT INFLIGHT FAULTS AND T/S PER FIM TASK THX. AND CHECK ADIRUCHR(39)S FOR ANY RELATED FAULTS.



**NG Maintenance Logs used for Fault Tree Calculation (page 2 of 2)**

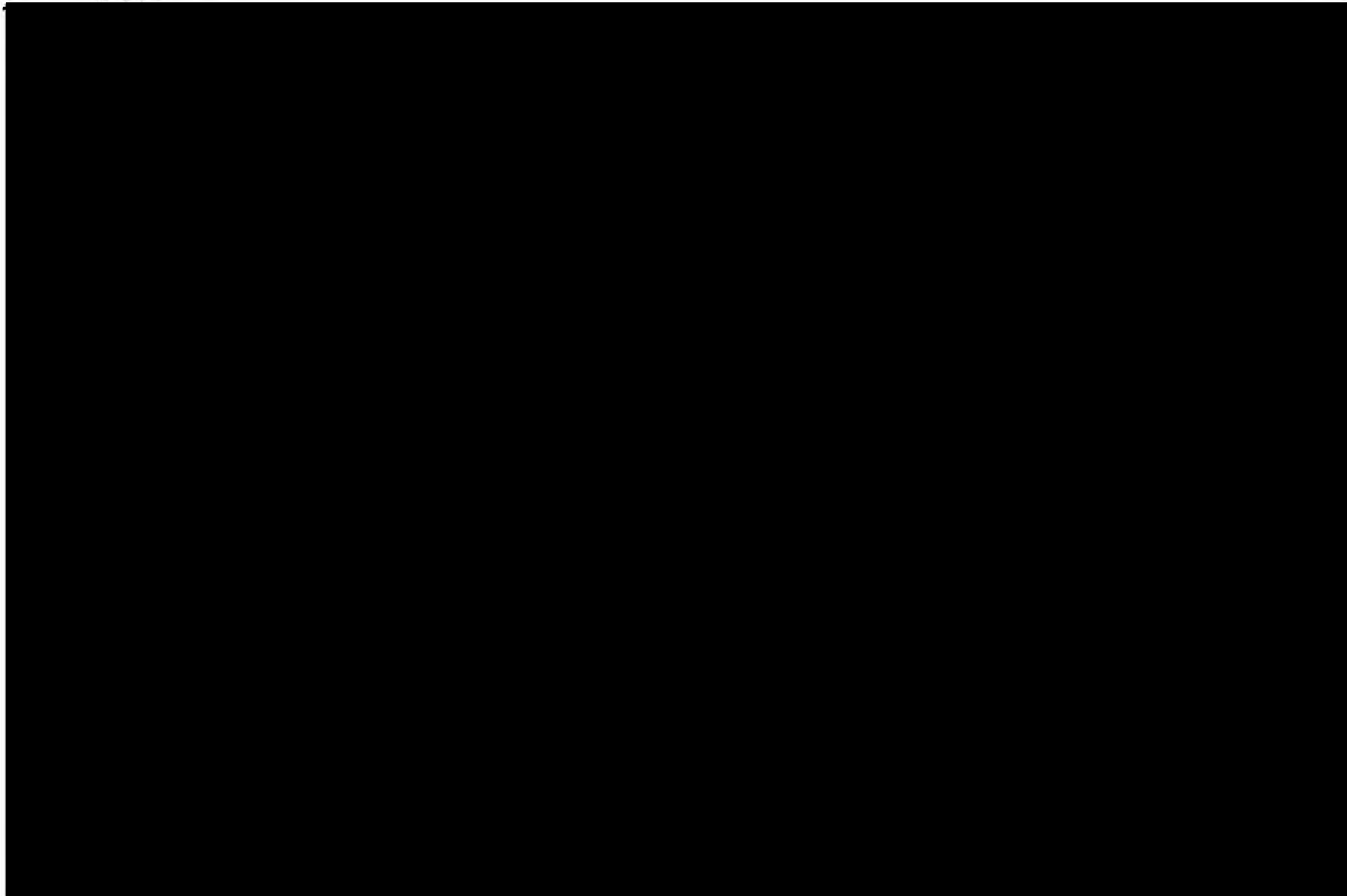
DISC_CMLPNT_DT	DISC_CMLPNT_TX
05-Mar-18	*** THIS ITEM IS MONITORED BY FLEET CONTROL TEAM, BECAUSE IT IS REPETITIVE OR INTERMITTENT FAILURE *** FLEET CONTROL - 34-21 - AIR DATA INERTIAL REFERENCE SYSTEM REFERENCE [REDACTED] REPORTED BY THE FLIGHT CREW: "DURING TRANSIT SPD
12-Mar-18	MX ENTRY DUE TO SEVERAL PROBLEMS WITH MINIMUM SPEED AND F/O SPEED TAPE DIFFERENCES REPLACE R/H AOA SENSOR
25-Jun-18	JUST AFTER LIFT OFF FROM RWY CAPT SPD LIM ILLUMINATED AND PITCH INDICATOR ON FLIGHT DIRECTOR WENT AWAY. UPON PASSING 30,000 STALL WARNING STARTED CONTINUOUSLY GOING ON AND OFF.
03-Jul-18	AIRSPED UNRELIABLE SPEEDTAPE OF RIGHT HAND SIDE UP TO 245 DURIN CLIMB OUT.
15-Aug-18	ALL MAXIMUM AND ALL MINIMUM SPEEDS ARE DISCREPANT FROM EACH OTHER BETWEEN # 1 AND # 2 PFDS DURING APPROACH [REDACTED]

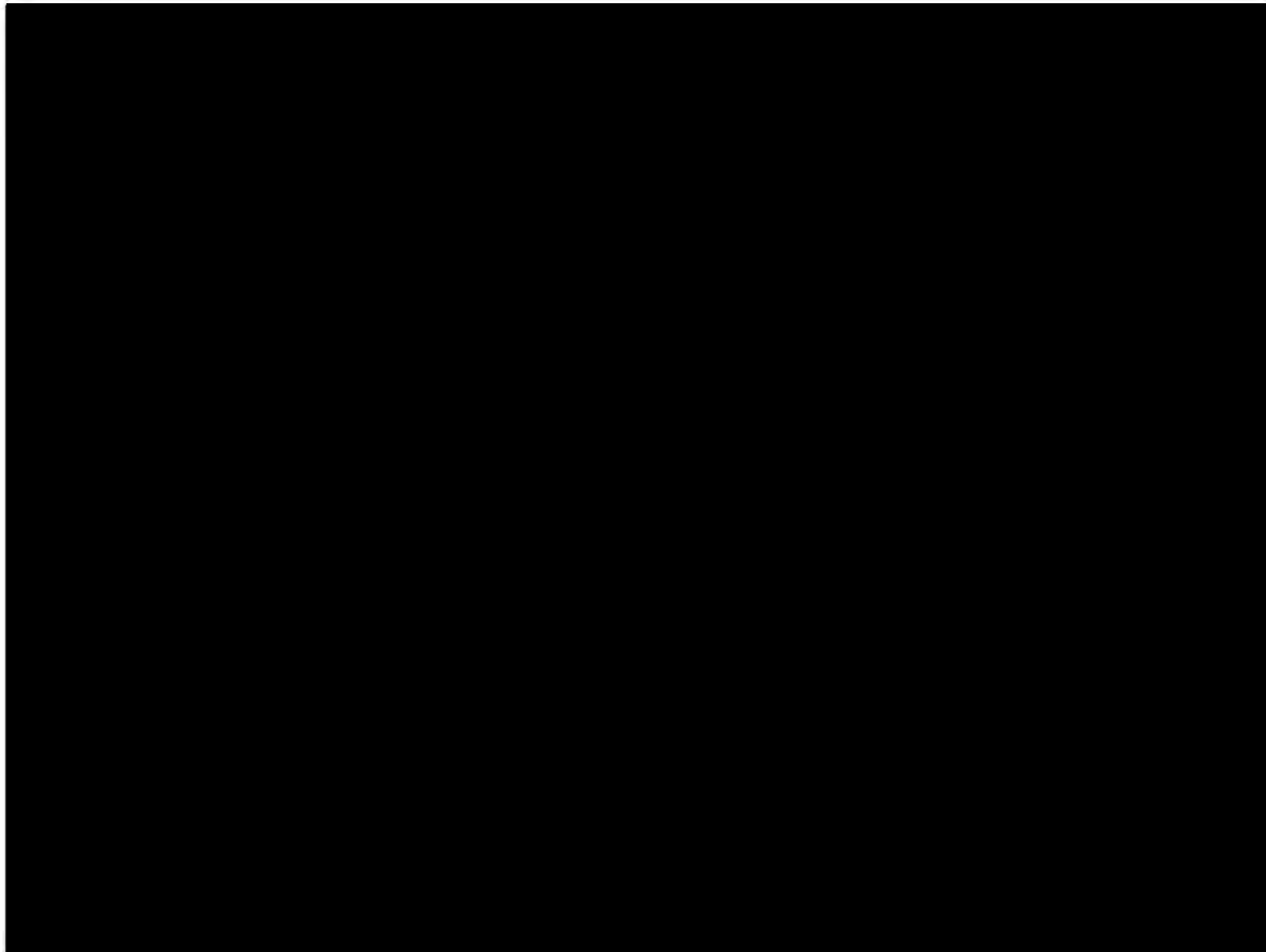
**Safety Decision:**

**Airplane Level Safety for 737MAX.**

### Summary Rationale:

*The potential for loss of CSF&L due to inappropriate flight crew response to airplane effects resulting from AOA vane error is assessed to be more probable than 1E-9 per flight cycle.*





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BOE\_ETH\_01304439

**Issue Title:** Erroneous AoA Data Results in High Crew Workload

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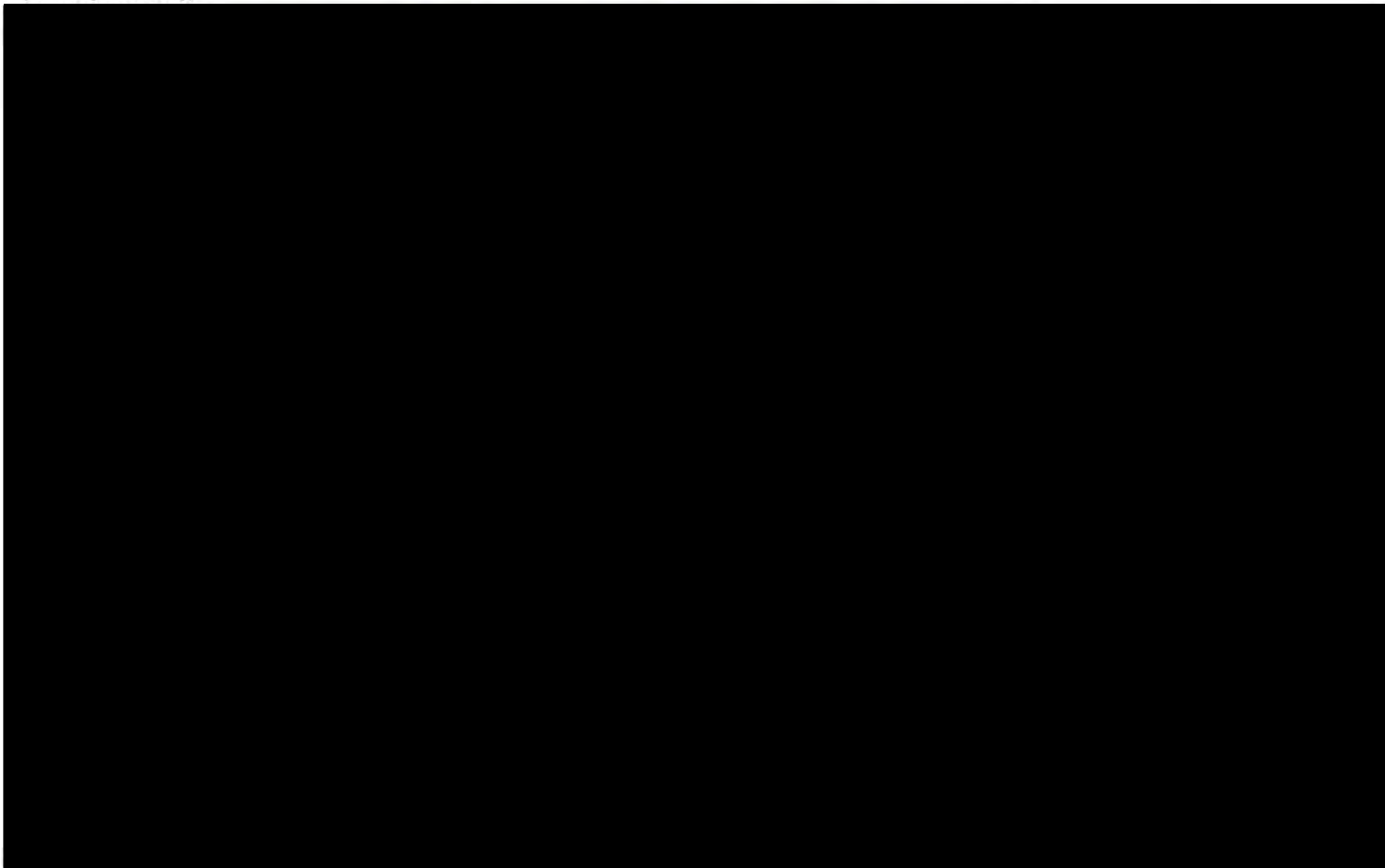
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BOE ETH 01304440

**Issue Title:** **Erroneous AoA Data Results in High Crew Workload**

(for "safety" issues only)



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BOE\_ETH\_01304441



Case 2:23-cv-00005 Document 232-1 Filed 10/08/23 Page 124 of 209

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BOE ETH 01304442

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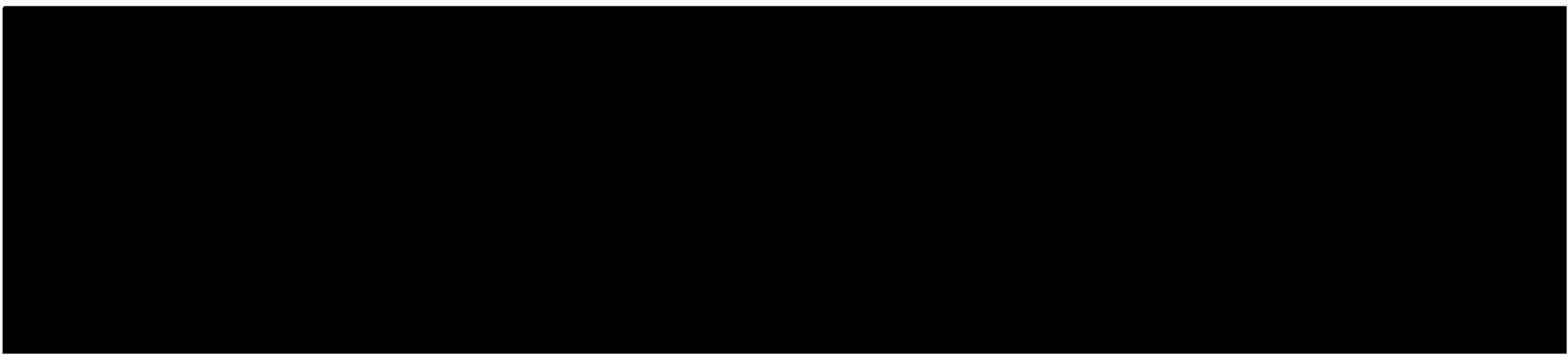
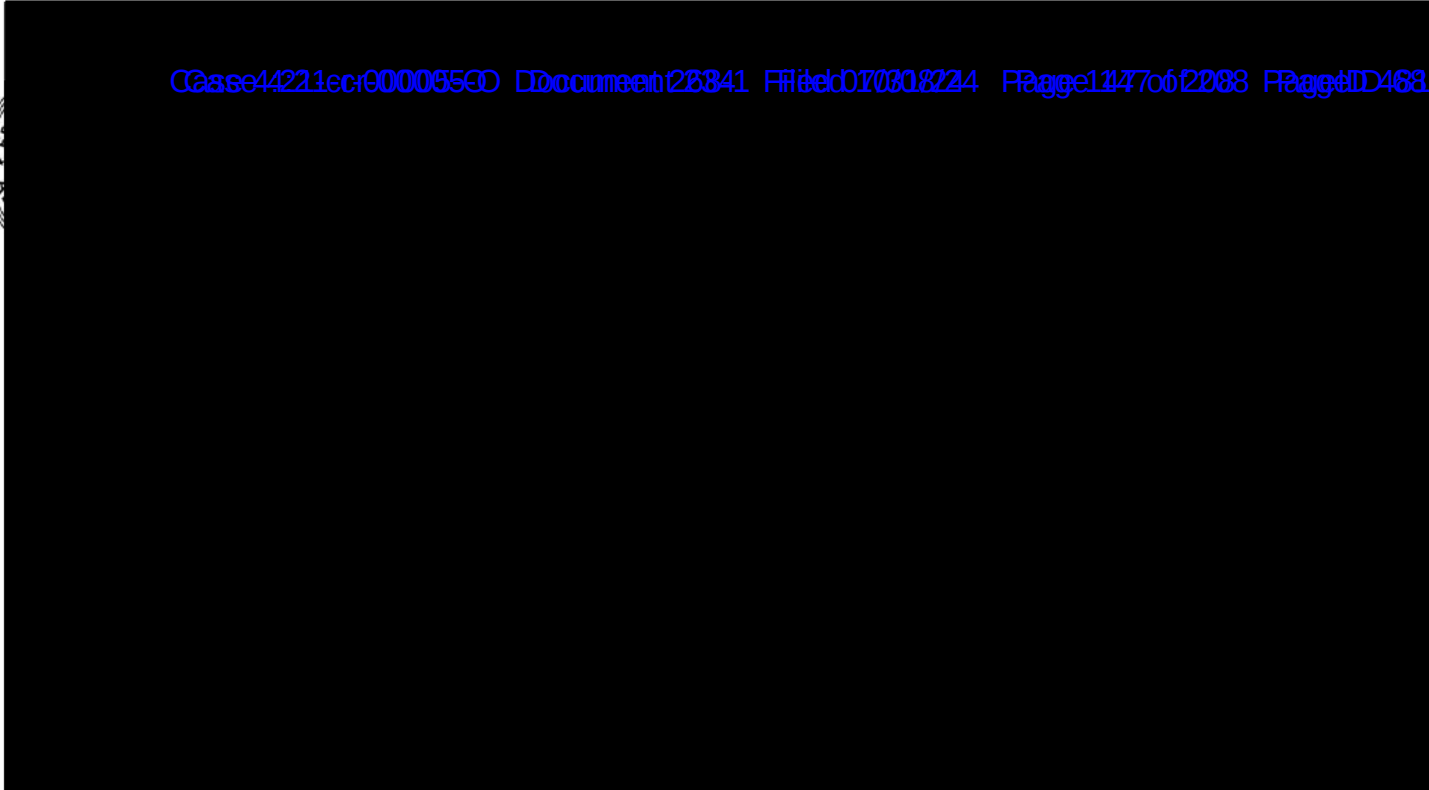
18



## ATTACHMENT A -7

( [REDACTED] )















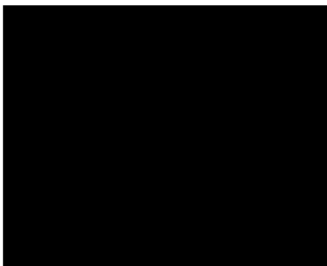
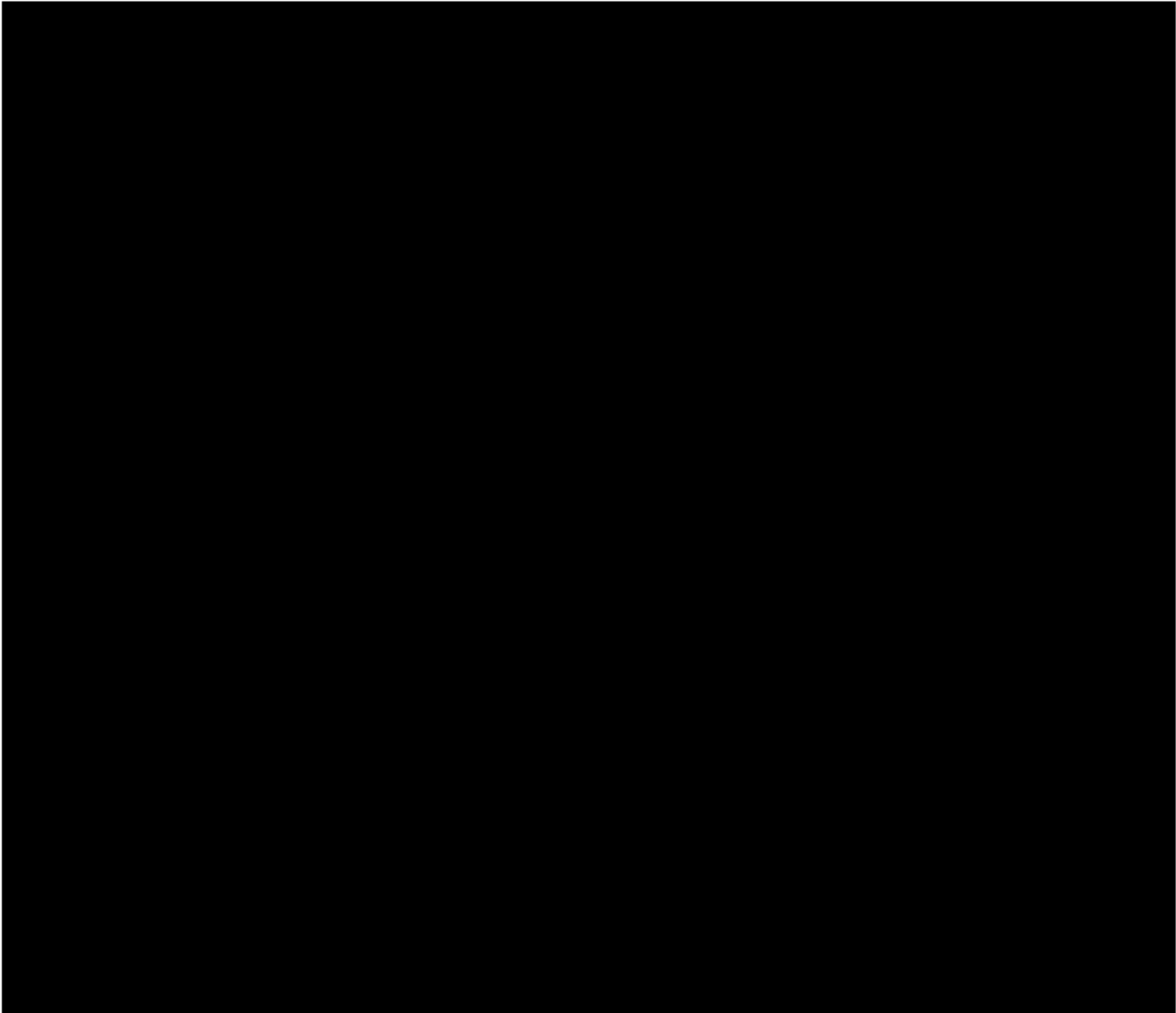


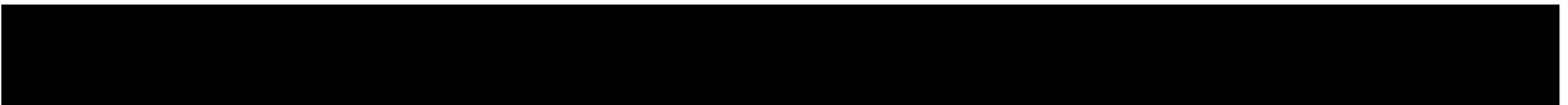
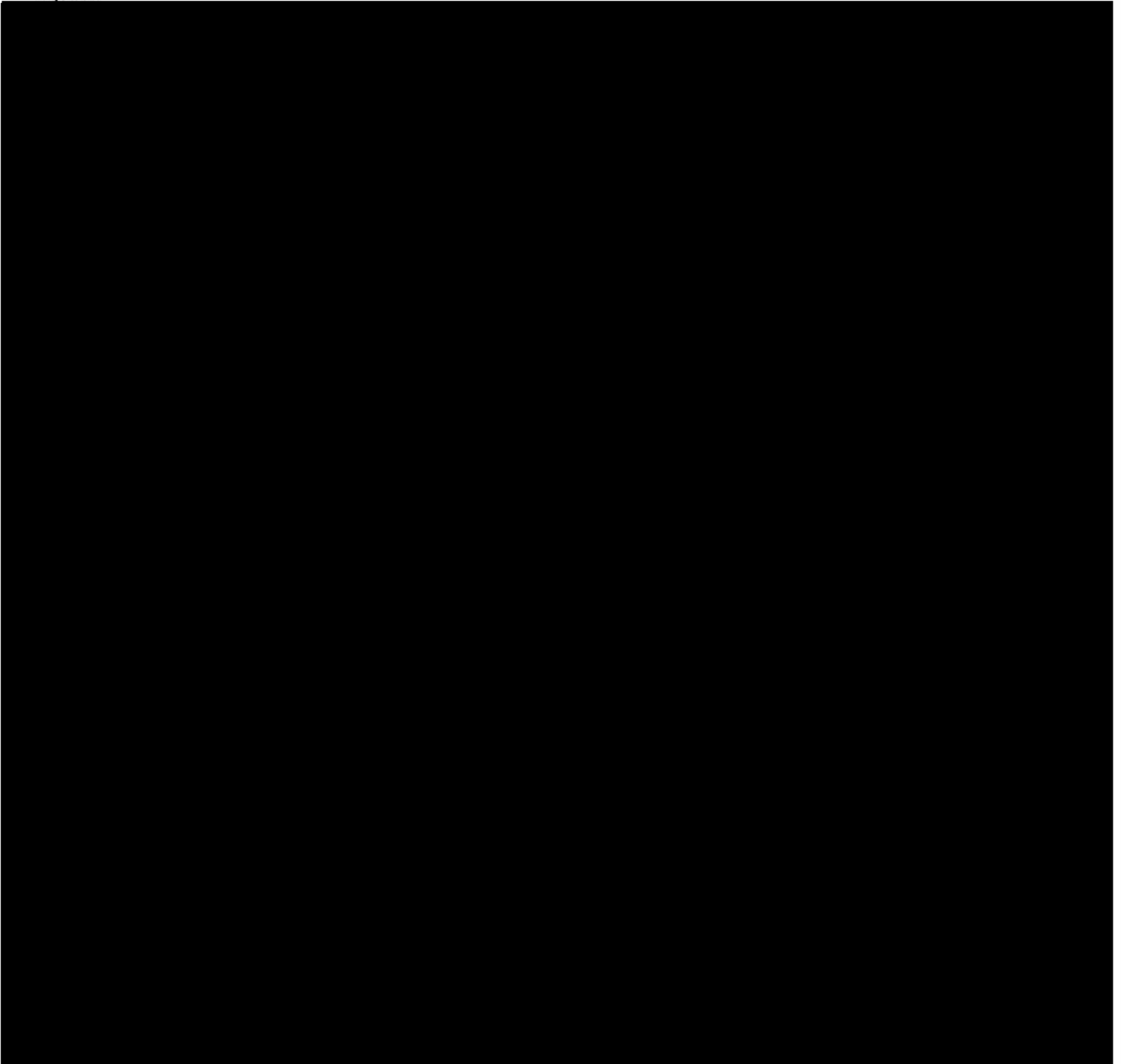




## ATTACHMENT A -8

( [REDACTED] )





[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



**ATTACHMENT A -9**  
**(BOE\_ETH\_01940873)**

**FOX Business Network  
Mornings with Maria  
November 13, 2018**

[ HYPERLINK "https://video.foxbusiness.com/v/5966322568001/?" \l "sp=show-clips" ]

MARIA: New questions this morning for Boeing. The Wall Street Journal is reporting that Boeing withheld information on its 737 model according to safety experts and others. That is the same model involved in the deadly Lion Air crash in Indonesia last month. And joining me right now to discuss that and a lot more in this Fox Business exclusive is the Chairman, President and CEO of Boeing Dennis Muilenburg. Dennis, it's good to see you this morning.

DENNIS: Good to see you Maria.

MARIA: Thank you so much for joining us. The story in the journal obviously is very concerning. What can you tell us in terms of what was told to the pilots and airlines about any new equipment in that 737?

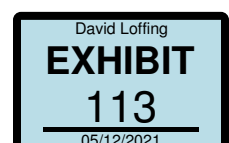
DENNIS: Maria, first of all, I think it is important that we all express our sympathies for the loss of Lion Air flight 610. Certainly our thoughts go with families that have been affected. We have been very engaged with the investigative authorities throughout providing all information necessary to make sure we do a full assessment of the situation. And the bottom line here is the 737 MAX is safe. Safety is core value for us at Boeing. It always has been. We ensure that our airplanes are safe. In fact, this airplane went through thousands of hours of tests, evaluation, certification, working with pilots and we have been very transparent on providing information and being fully cooperative on the investigative activity.

MARIA: So what happened? Apparently there were 10 computers about the angle of the nose, were not accurate and then the plane went down, all 189 people dead. Do you have a sense of what went wrong?

DENNIS: Yeah, as the Indonesian authorities have pointed out initially, there were some indications of inaccurate angle of attack signal being sent to the airplane. Of course our airplane has the ability to handle that. We have procedures in place, and we have already issued a couple additional bulletins to our operators and pilots around the world that point them back to existing flight procedures to handle that kind of condition. So again, we are going to continue to support the investigation, as it proceeds.

MARIA: One of the Boeing officials quoted in the journal today, one high ranking Boeing official said that the company had decided against disclosing more details to cockpit crews due to concerns about inundating average pilots with too much information. Was that a decision now that you regret?

DENNIS: No—again we ensure we provide all of the information needed to safely fly our airplanes. Again this comes out of thousands of hours of testing, evaluating and simulating and providing the information that our pilots need to operate our airplanes safely. We will continue to do that, as I said. As part of the process here, we have already issued a couple bulletins to pilots and operators that point them back to existing flight procedures to handle this kind of a situation. So we are going to continue to fully cooperate in the investigation. I think really important again, the bottom line here is that the 737 MAX is a very safe airplane and we're very confident.



MARIA: But was there a new system that wasn't disclosed to the pilots?

DENNIS: There are new systems on airplanes that are designed to take advantage of the capabilities of the airplane and provide control capability in high angle of attack conditions. And those systems operate properly. And again, in certain failure modes, if there's an inaccurate angle of attack sensor feeding information to the airplane, there is a procedure to handle that. So again, as part of the investigation process, we are going to make sure we fully understand that. We are going to make sure we are providing all the information necessary, and the appropriate training, and go back to the core value here – that the airplane is safe and we know how to fly it safely and we're very confident.

MARIA: Was that information in terms of what to do should something change, was that information available to the pilots? Did they know how to operate it should the nose be in a different position?

DENNIS: Yeah, in fact that is part of the training manual. It's an existing procedure. So the bulletin we put out again last week over the weekend, pointed to that existing flight procedure.

MARIA: Obviously I know you're answering lots of questions this morning, and this week, after this horrific crash and you are going to get more information. What would be timing on that? When do you expect to hear from the FAA on this?

DENNIS: Well this is an ongoing investigation so it will take whatever time is necessary to make sure it is done thoroughly. Again we participate fully in these investigations. We provide technical assistance. We will continue to do that until the work is complete. It's very important that we do this in a diligent, thorough manner. Bottom line, is we want to ensure safety in the system and continue to have confidence in the 737 MAX.

**DOCUMENT PRODUCED IN NATIVE  
FORMAT**

**ATTACHMENT A -10**  
**(BOE\_ETH\_01940871)**

**From:** Muilenburg (US), Dennis A [REDACTED]  
**To:** Toulouse (US), Anne C; Smith (US), Greg; Luttig (US), Michael; McAllister (US), Kevin  
**CC:** Schmidt (US), Ann M; Bickers (US), Charles N; Sinnett (US), Michael K  
**Sent:** 11/27/2018 11:23:06 AM  
**Subject:** RE: HOT - Quotes for Attribution NYT and WSJ

Anne, Yes, good to go!

Dennis

**From:** Toulouse (US), Anne C  
**Sent:** Tuesday, November 27, 2018 1:01 PM  
**To:** Muilenburg (US), Dennis A [REDACTED]; Smith (US), Greg  
[REDACTED]; Luttig (US), Michael [REDACTED]; McAllister (US), Kevin  
[REDACTED]  
**Cc:** Schmidt (US), Ann M [REDACTED]; Bickers (US), Charles N  
[REDACTED]; Sinnett (US), Michael K [REDACTED]  
**Subject:** HOT - Quotes for Attribution NYT and WSJ  
**Importance:** High

We've compiled the following quotes reflecting comments made by Mike Sinnett in his off-the-record briefings (thanks to Chaz Bickers.) We're planning to use these with industry-source attribution to blunt input from the WSJ and NYT who are telling us that pilots asserting they are not trained to deal with MCAS. We see minimal risk and upside. Let me know if you have any concerns. Anne

The bottom quote would specifically address a recurring theme that pilots are telling reporters that what worked on the NG – pulling back on yoke to cutout trim – does not work on MAX. Having conversational quote input would help with our positioning.

"There may be four or five different causes for uncommanded trim, so what's most important for flight crews in an emergency situation is *"What do I need I do right now to resolve this?"* Not to spend time thinking about the cause. In this case, the procedure is exactly the same on both the 737 MAX and NG airplanes. It's on page one of the Quick Reference Handbook, and crews memorize it to resolve the situation as quickly as possible," said an industry source familiar with the matter.

"When Boeing developed its training and materials, it followed a process that was absolutely consistent with introducing previous new airplane types. The process for the flight crews is to ensure they have all the information to safely operate the airplane and for maintenance and fleet chiefs to understand how to ensure the airplanes are serviceable," said an industry source familiar with the matter.

For those specifically asking about yoke correction:

"Control column cutout is not part of the runaway stabilizer procedure. The checklist to address uncommanded trim is unchanged from the NG to the MAX, regardless of cause," said an industry source familiar with the matter.

## **ATTACHMENT A-11**

***In the Matter of the Boeing Co., Respondent.,***

**Release No. 11105 (Sept. 22, 2022)**

**UNITED STATES OF AMERICA**  
**Before the**  
**SECURITIES AND EXCHANGE COMMISSION**

**SECURITIES ACT OF 1933**  
**Release No. 11105 / September 22, 2022**

**ADMINISTRATIVE PROCEEDING**  
**File No. 3-21140**

**In the Matter of**

**THE BOEING COMPANY,**

**Respondent.**

**ORDER INSTITUTING CEASE-AND-  
DESIST PROCEEDINGS PURSUANT TO  
SECTION 8A OF THE SECURITIES ACT  
OF 1933, MAKING FINDINGS, AND  
IMPOSING A CEASE-AND-DESIST  
ORDER**

**I.**

The Securities and Exchange Commission (“Commission”) deems it appropriate that cease-and-desist proceedings be, and hereby are, instituted pursuant to Section 8A of the Securities Act of 1933 (“Securities Act”), against The Boeing Company (“Boeing” or “Respondent”).

**II.**

In anticipation of the institution of these proceedings, Respondent has submitted an Offer of Settlement (the “Offer”), which the Commission has determined to accept. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission, or to which the Commission is a party, and without admitting or denying the findings herein, except as to the Commission’s jurisdiction over it and the subject matter of these proceedings, which are admitted, Respondent consents to the entry of this Order Instituting Cease-And-Desist Proceedings Pursuant to Section 8A of the Securities Act of 1933, Making Findings, And Imposing A Cease-And-Desist Order (“Order”), as set forth below.

**III.**

On the basis of this Order and Respondent’s Offer, the Commission finds<sup>1</sup> that:

**SUMMARY**

1. This matter concerns Boeing’s failure to exercise reasonable care in making statements to the public following two fatal accidents involving its new 737 MAX line of aircraft.

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<sup>1</sup> The findings herein are made pursuant to Respondent’s Offer of Settlement and are not binding on any other person or entity in this or any other proceeding.



Those failures resulted in Boeing making materially misleading statements to investors in November 2018 and April 2019.

2. On October 29, 2018, a Boeing 737 MAX aircraft operated by PT Lion Mentari Airlines (“Lion Air”) as Flight 610 crashed shortly after takeoff from Jakarta, Indonesia, killing all 189 passengers and crew (the “Lion Air Crash”).

3. Less than five months later, on March 10, 2019, a second 737 MAX, this one operated by Ethiopian Airlines as Flight 302, crashed shortly after takeoff from Addis Ababa, Ethiopia, killing all 157 passengers and crew (the “Ethiopian Airlines Crash”).

4. Accident investigations revealed that both crashes involved the erroneous activation of the Maneuvering Characteristics Augmentation System (“MCAS”), a new Boeing flight control law (not described in the 737 MAX flight manuals or pilot training materials) that was designed to help avert stalls by pushing the nose of the airplane downward without input from the crew whenever a sensor on the outside of the fuselage indicated the aircraft was approaching an angle at which a stall may occur.

5. Neither Lion Air Flight 610 nor Ethiopian Airlines Flight 302 was approaching a stall at the time MCAS activated. Rather, on both flights, an erroneous signal from the external sensor repeatedly triggered MCAS while the plane was climbing at a normal angle. On both flights, the crews were unable to regain control of the airplane following the unintended MCAS activations.

6. On March 13, 2019, three days after the Ethiopian Airlines Crash, the U.S. Federal Aviation Administration (“FAA”) issued an order grounding the entire 737 MAX fleet due to ongoing safety concerns; similar grounding orders were issued by regulators around the world. Ultimately, more than 20 months would pass before a 737 MAX was once again permitted to fly.

7. In the wake of the Lion Air Crash, Boeing sought to reassure the public and the market about the safety of the 737 MAX. Later, following the Ethiopian Airlines Crash and the subsequent grounding of the 737 MAX, Boeing sought to reassure the public and the market that the process by which the 737 MAX was designed, tested and certified to fly complied with all applicable regulations and with Boeing’s own standards and historical practices. In doing so, Boeing failed to exercise reasonable care, resulting in public statements that were materially misleading to investors.

8. The first misleading public statement was contained in a press release issued by Boeing on November 27, 2018, following the release of the Indonesian government’s preliminary report on the Lion Air Crash (the “November 2018 Press Release” or “Press Release”). In that Press Release, Boeing highlighted certain aspects of the preliminary accident report while downplaying others, and also offered the public its “assurance” that the 737 MAX “is as safe as any airplane that has ever flown the skies.” However, by that point, Boeing had determined that MCAS posed an ongoing safety issue that required remediation; indeed, Boeing had already begun work on a redesign of the MCAS software to address the safety issue. However, the Press Release made no mention of the MCAS safety issue or planned software redesign.

9. A second set of misleading public statements was made in April 2019 following the Ethiopian Airlines Crash and the 737 MAX grounding (the “April 2019 Statements”). While speaking to investors and analysts during Boeing’s first quarter 2019 earnings call on April 24, 2019, and in comments to reporters following Boeing’s annual shareholders’ meeting on April 29, 2019, Boeing, through its then President and CEO, Dennis A. Muilenburg (“Muilenburg”), stated that “there was no surprise or gap or unknown ... that somehow slipped through [the] certification process” for the 737 MAX, and that Boeing had “gone back and confirmed ... that we followed exactly the steps in our design and certification processes that consistently produce safe airplanes.”

10. Prior to the April 2019 Statements, Boeing had, in responding to a subpoena issued by the U.S. Department of Justice (“DOJ”) in a criminal investigation into the 737 MAX certification process, uncovered documents that suggested that key facts about MCAS’s operational scope had not been disclosed to the FAA’s Aircraft Evaluation Group (“FAA-AEG”), the section of the FAA responsible for the review and approval of pilot training requirements and flight manuals for the 737 MAX. In addition, an internal compliance review had separately identified certain documentation gaps and inconsistencies relating to MCAS and the certification process. None of those facts were disclosed or otherwise known to the public at that time.

11. Boeing offered and sold debt securities to investors after it issued the November 2018 Press Release. Boeing also offered and sold debt securities to investors after Muilenburg’s April 2019 Statements.

12. By failing to exercise reasonable care to ensure that statements in its November 2018 Press Release and in the April 2019 Statements were not materially misleading by ensuring that all facts necessary to make those statements not misleading under the circumstances were disclosed to investors, Boeing violated Sections 17(a)(2) and 17(a)(3) of the Securities Act.

### **RESPONDENT**

13. **Boeing**, a Delaware corporation headquartered in Arlington, Virginia, engages in the design, development, manufacture, sale and support of commercial jet aircraft, military aircraft, satellites, and other aerospace products. Boeing’s common stock is registered under Section 12(b) of the Securities Exchange Act of 1934 (“Exchange Act”) and trades on the New York Stock Exchange (under the ticker symbol “BA”).

### **OTHER RELEVANT INDIVIDUAL**

14. **Muilenburg**, age 58, is a resident of Collinsville, Illinois. Muilenburg was Boeing’s President from December 2013 to December 2019, CEO from July 2015 to December 2019, and Chairman of the Board of Directors from March 2016 to October 2019.

## **FACTS**

### **A. Background: The 737 MAX and MCAS**

15. Boeing's 737 line of commercial aircraft first came to market in the 1960s. Since that time, Boeing has designed, manufactured, and sold approximately 10 versions of the Boeing 737 to its customers, including commercial airlines around the world.

16. The 737 MAX is Boeing's most recent version of the 737 aircraft line. The 737 MAX was conceived after Boeing faced intense competition from one of its rival commercial airplane manufacturers to produce a fuel-efficient, single aisle plane.

17. Boeing began designing the 737 MAX in 2011 and submitted its initial application for an Amended Type Certificate ("ATC") to the FAA in 2012. In March 2017, the FAA issued an ATC to Boeing for the 737 MAX, and the new plane entered into service a few months later. Quickly after it was launched, the 737 MAX became the best-selling plane in Boeing's history.

18. Although the 737 MAX was built upon the design of its predecessor, the 737 Next Generation (the "737 NG"), some changes were made. For one thing, the engines on the 737 MAX were larger and were positioned slightly forward under the airplane's wings. These changes increased fuel efficiency but altered the aerodynamics of the 737 MAX as compared to its predecessor, particularly at higher angles-of-attack ("AoA"), a measure of the angle between the aircraft's wing and the oncoming air.

19. In an effort to make the 737 MAX handle more like the 737 NG, Boeing introduced MCAS, a computerized control that would adjust the airplane's horizontal stabilizer in the event the plane's computer received data from an external sensor (known as the AoA sensor) indicating that the angle of the airplane was too steep, which could cause the plane to stall. MCAS was designed to make the necessary adjustments without input from the crew.

20. MCAS was originally designed to operate only under conditions involving both high speeds (Mach 0.6-0.8) and high AoA, conditions that were "outside the normal flight envelope." MCAS was therefore not expected to engage during the course of a normal commercial flight.

21. Later in the design and certification process, however, Boeing expanded the operational scope of MCAS to address a tendency of the 737 MAX to pitch upwards at high AoA even at lower speeds. To achieve this, Boeing widened the speed range within which MCAS could operate to Mach 0.2-0.8, now encompassing speeds at which a commercial flight would regularly travel, and also expanded MCAS's command authority, or the degree to which MCAS could push down the nose of the plane, at lower speeds (the "MCAS Expansion").

**B. U.S. Regulators Approve the Pilot Training Requirements and Flight Manuals for the 737 MAX without Knowledge of the MCAS Expansion.**

22. When a derivative of an existing aircraft model enters service, pilots certified to fly the previous model can become certified to fly the new model by undergoing “differences training,” a training course focused on those aspects of the new model (here, the 737 MAX) that are meaningfully different from the previous model (here, the 737 NG). As a general matter, the greater the similarity between the two models, the less differences training is required, reducing training costs incurred by operators of the aircraft.

23. In connection with the overall evaluation, approval and certification process for a derivative airplane, the FAA-AEG is responsible for determining the required level of differences training for U.S.-based airline pilots – and, relatedly, the extent to which new or updated functions must be described in the flight manuals – based on information provided, and recommendations made, by manufacturers such as Boeing. At the end of this process, the FAA-AEG publishes a Flight Standardization Board Report (the “FSB Report”) which contains, among other things, the FAA-AEG’s determination on the level and scope of differences training and the contents of the flight manuals.

24. Here, Boeing took the view that pilots transitioning from the 737 NG to the 737 MAX should be required to undergo only a short computer-based training (“CBT”) course, as opposed to more extensive, simulator-based training. Indeed, even before certification, Boeing advertised, and, in some cases, contractually guaranteed, to its airline customers that only CBT would be required for 737 NG pilots to operate the 737 MAX. For instance, one purchase agreement with a major airline required Boeing to refund up to \$1 million per plane in the event the FAA required more than CBT for 737 MAX pilots.

25. In advocating for CBT only, Boeing employees responsible for communicating with the FAA-AEG as to differences training and manuals certification – including Boeing Employee-1 and Boeing Employee-2, senior members of the 737 MAX Flight Technical Group – presented MCAS to the FAA-AEG as a feature that could only activate in a very specific, high-speed scenario that was outside the normal flight envelope and therefore unlikely to ever be encountered by a commercial pilot. They made these representations to FAA-AEG personnel beginning in or around June 2015.

26. In or around March 2016, Boeing introduced the MCAS Expansion, significantly broadening MCAS’s operational scope. No longer limited to a specific, rare high-speed scenario, MCAS could now activate at abnormally high AoA throughout the entire speed range of the 737 MAX, including during the initial climb and the final descent, and its command authority was significantly increased to allow it to function effectively at lower speeds.

27. In or around August 2016, the FAA-AEG made a provisional determination to accept Boeing's proposal of CBT-only and to omit MCAS from the differences training and flight manuals. At that time, the FAA-AEG was not aware of the MCAS Expansion.<sup>2</sup>

28. Boeing employees responsible for communicating with the FAA-AEG understood, as evidenced by internal emails, that this provisional determination was contingent on there being "no significant systems changes to the airplane," and that the subsequent disclosure of additional differences to the FAA-AEG "would be a huge threat to that differences training determination."

29. On or about November 15, 2016, during a test flight of the 737 MAX in a simulator, Boeing Employee-1 experienced what Boeing Employee-1 recognized as MCAS operating at lower speed. Later that day, Boeing Employee-1 and Boeing Employee-2 discussed MCAS in an electronic chat (the "November 15, 2016 Chat") which contained the following exchange:

**Boeing Employee-1:** Oh shocker alerT! / MCAS is now active down to M[ach] .2 / It's running rampant in the sim[ulator] on me... / so I basically lied to the regulators (unknowingly)

**Boeing Employee-2:** [I]t wasn't a lie, no one told us that was the case

30. Following this exchange, Boeing employees responsible for communicating with the FAA-AEG did not inform the FAA-AEG about the MCAS Expansion. And in a January 17, 2017 email to the FAA-AEG, Boeing Employee-1 reminded the FAA-AEG to delete any references to MCAS from the FSB Report, saying "Flight Controls: Delete MCAS, recall we decided we weren't going to cover it in the [manuals] or the CBT ... since it's way outside the normal operating envelope."

31. On or about July 5, 2017, the FAA-AEG published the FSB Report, which omitted any information about MCAS. Consistent with the determinations made by the FAA-AEG as reflected in the published FSB Report, MCAS was not described in the 737 MAX flight manuals or pilot training materials, and was not part of the required differences training for pilots transitioning to the 737 MAX when the 737 MAX entered into service in mid-2017.

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<sup>2</sup> The MCAS Expansion was reflected in certification documents provided to a different group within the FAA that was responsible for determining whether the 737 MAX met U.S. federal airworthiness certification standards; however, that group was not involved in the review and approval of pilot training requirements and flight manuals.

**C. The Lion Air Crash and the November 2018 Press Release**

***Boeing's Safety Review Board Determines that MCAS Poses a Safety Issue that Requires Remediation, and Boeing Engineers Begin Work on a Software Redesign.***

32. The Lion Air Crash occurred on October 29, 2018. Soon after the crash, investigators identified repeated unintended activations of MCAS triggered by erroneous AoA data as a cause of the accident.

33. In the weeks following the Lion Air Crash, Boeing convened a series of meetings of its Safety Review Board (“SRB”) – an internal body comprised of Boeing personnel that evaluate in-service aircraft safety issues – on November 4, 2018, November 6, 2018, and November 15, 2018, to assess the ongoing safety of the 737 MAX in light of the Lion Air Crash.

34. The SRB determined that the high crew workload required to counter repeated unintended MCAS activation triggered by erroneous AoA data, and the limited amount of time a crew might have to do so before the airplane became unrecoverable (as happened on the Lion Air Crash flight), posed an “airplane safety issue” that required remediation. The crew workload issue was compounded by the presence of other distracting visual, auditory, and tactile alerts and warnings associated with a damaged or malfunctioning AoA sensor on the 737 MAX.

35. On November 6, 2018, Boeing issued a bulletin to operators of 737 MAX aircraft informing them that erroneous AoA data could cause uncommanded nose-down movements of the aircraft (without mentioning MCAS by name). The bulletin instructed pilots to follow the procedures in the flight manuals for a “runaway stabilizer” – a type of malfunction that could present as similar to repeated unintended MCAS activations on the 737 MAX – in the event of uncommanded nose-down movement.

36. On November 7, 2018, the FAA issued a public emergency airworthiness directive to airlines operating the 737 MAX, informing them of the potential for repeated nose-down movements of the aircraft which, “if not addressed, could cause the flight crew to have difficulty controlling the airplane ... and [could result in] possible impact with terrain.” The airworthiness directive identified the issue as an “unsafe condition” on the 737 MAX, and, as an “interim action” pending further analysis, referred crews to the runaway stabilizer procedures described in Boeing’s November 6 bulletin.

37. On or about November 15, 2018, Boeing safety engineers concluded that, in light of the SRB’s findings, the MCAS software should be redesigned and re-installed on the 737 MAX fleet to remediate the high crew workload “airplane safety issue.” They determined that the software redesign had to be completed within approximately 27 months, but that the 737 MAX fleet could continue to operate in the interim in light of Boeing’s bulletin and the FAA emergency airworthiness directive.

38. Around the same time, the FAA conducted its own safety analysis and reached conclusions similar to those reached by the Boeing SRB, including that the Boeing 737 MAX could continue to operate pending remediation of the MCAS-related crew workload issue;



however, the FAA review concluded that a software redesign would have to be completed within approximately 8 months (later shortened to approximately 7 months).

***Boeing Assures the Public that the 737 MAX is “as Safe as Any Airplane that has Ever Flown the Skies” while Working to Remediate the “Airplane Safety Issue.”***

39. On or about November 15, 2018, senior executives at Boeing, including Muilenburg, were informed that the SRB had identified the crew workload issue associated with unintended MCAS activation due to erroneous AoA data as an “airplane safety issue” that required remediation, and that Boeing engineers were working on redesigning the MCAS software to address the issue.

40. Also, on or about November 15, 2018, Boeing’s Communications team began working with senior Boeing engineers and lawyers, among others, to draft a press release to update the public following the Lion Air Crash (the “Draft Press Release”), which would evolve to become the November 2018 Press Release.

41. Early versions of the Draft Press Release generally confirmed the plane’s safety, stating that the 737 MAX was either a “safe airplane” or that it “continue[d] to be safe to fly.” Certain versions also noted that Boeing was working with the FAA to “expedite the development and certification of a flight control software update” for MCAS.

42. During this time period, Boeing was the subject of extensive negative media coverage over allegations that Boeing had withheld information from pilots, airlines, regulators and the general public regarding MCAS. Other articles raised concerns about MCAS being too powerful and/or relying on a single sensor, and about the integrity of the certification process for the 737 MAX.

43. Boeing’s stock price was also dropping during this time. By November 20, 2018, Boeing’s stock price had fallen by 11.6% since the Lion Air Crash.

44. On November 20, 2018, Muilenburg expressed disappointment in Boeing’s response to the negative post-crash media coverage, stating in an email that “[w]e are spending too much time playing defense... [we] need to start playing some offense.”

45. The next day, an official at the U.S. National Transportation Safety Board (“NTSB”) emailed Boeing a draft of the preliminary report on the Lion Air accident investigation (the “Lion Air Preliminary Report”), which was expected to be released to the public by the Indonesian government within the coming days.

46. Later that day, the Communications team sent Muilenburg and other executives an updated version of the Draft Press Release. After reviewing the draft, Muilenburg directed that the Draft Press Release be modified to incorporate a discussion of facts drawn from the Lion Air Preliminary Report, and also suggested removing discussion of the planned MCAS software redesign from the Draft Press Release.

47. On November 24, 2018, the Communications team began revising the Draft Press Release in accordance with Muilenburg's instructions. As a result, the Draft Press Release underwent significant changes as its focus shifted to the Lion Air Preliminary Report.

48. From that point forward, the Draft Press Release no longer mentioned the development of an "MCAS software update," and also stated that Boeing's customers and passengers "have [Boeing's] assurance that the 737 MAX is as safe as any airplane that has ever flown the skies." In the days that followed, Muilenburg and other executives worked with the Communications team to further revise the Draft Press Release.

49. On the afternoon of November 27, 2018, Muilenburg approved the issuance of the November 2018 Press Release via email, writing, "Looks great – factual, and sticks to the report while making our key points. Good to go here ...." The November 2018 Press Release was published on Boeing's website that evening, just after the public release of the Lion Air Preliminary Report by the Indonesian government.

50. The November 2018 Press Release highlighted certain facts from the Lion Air Preliminary Report suggesting that pilot error and poor airplane maintenance by Lion Air had contributed to the crash. The November 2018 Press Release did not mention that the SRB had identified an ongoing "airplane safety issue" associated with MCAS or the planned software redesign – indeed, it did not mention MCAS at all. The final November 2018 Press Release also contained the statement: "As our customers and their passengers continue to fly the 737 MAX to hundreds of destinations around the world every day, they have our assurance that the 737 MAX is as safe as any airplane that has ever flown the skies."

51. Prior to the issuance of the November 2018 Press Release, Boeing provided drafts to the FAA and NTSB for informational purposes, and those drafts contained the "as safe as any airplane that has ever flown the skies" language. After the November 2018 Press Release was published, a senior official at the NTSB complained to Boeing, via email, that the November 2018 Press Release was not appropriate given Boeing's involvement in the crash investigation, and that "the omission of certain facts and the highlighting of other facts [in the November 2018 Press Release] leads the reader to Boeing's analytical conclusion."

52. On November 28, 2018, the first trading day following the public release of the Lion Air Preliminary Report and Boeing's after-hours publication of the November 2018 Press Release, Boeing's stock closed at \$333.5, up 4.8% from the prior day's close (compared to a 2% gain for the S&P 500).

53. The November 2018 Press Release – in particular, the statement that "the 737 MAX is as safe as any airplane that has ever flown the skies" – was misleading under the circumstances absent any discussion of an "airplane safety issue" that required remediation by fixing the MCAS software. Accordingly, Boeing failed to exercise reasonable care in connection with the November 2018 Press Release.

54. A reasonable investor would have considered the statement in the November 2018 Press Release that "the 737 MAX is as safe as any airplane that has ever flown the skies," as well



as contrary facts set forth in Paragraph 53, *supra*, that were omitted from the November 2018 Press Release, to be material.

55. In or around February 2019, Boeing offered and sold \$1.5 billion of debt securities to investors. At the time of the offers and sales, Boeing had neither retracted nor modified the materially misleading statement contained in the November 2018 Press Release.

**D. The Boeing Certification Compliance Review and Discovery of “Concerning” Documents Relating to MCAS Differences Training and Manuals**

***Boeing’s Compliance Review Identifies Documentation Gaps and Inconsistencies in the Certification Process Relating to MCAS.***

56. On or about November 21, 2018, Boeing senior management assembled a team to review the 737 MAX certification process with a particular focus on MCAS (the “MCAS Certification Compliance Review”), led by a senior Boeing engineer who was familiar with the 737 MAX design, but who had not been directly involved in the certification process. The MCAS Certification Compliance Review team was specifically directed to include in its review aspects of the certification process relating to differences training and flight manuals.

57. The MCAS Certification Compliance Review team presented its initial findings and conclusions to Boeing senior engineering and compliance personnel, together with representatives of the FAA, on or about December 17, 2018, in a live presentation accompanied by a written report. Muilenburg was briefed on the core findings around this time as well. While the written report was further reviewed over the next several months, the core findings and conclusions did not change.

58. The MCAS Certification Compliance Review ultimately concluded that the certification process with respect to MCAS was compliant with FAA regulations. However, the written report identified several documentation gaps and inconsistencies relating to MCAS and the certification process, including a lack of adequate supporting documentation for the assumption, used by Boeing engineers and test pilots throughout the design and testing process, that repeated unintended MCAS activations (as the crew of Lion Air Flight 610 experienced) would be no more hazardous than a single unintended MCAS activation – an assumption that was later called into doubt by the SRB.

59. The MCAS Certification Compliance Review report also noted that the supporting rationale for the decision to remove MCAS from the differences training and flight manuals was not properly documented and had been made contemporaneously with the MCAS Expansion. These findings raised questions as to whether the FAA-AEG had been made aware of, and had an opportunity to evaluate, the MCAS Expansion when it agreed to Boeing’s proposal to remove MCAS from the differences training and manuals.

60. The MCAS Certification Compliance Review team was not aware of the November 15, 2016 Chat. Consequently, the November 15, 2016 Chat was not referenced in the MCAS Certification Compliance Review report and did not factor into its findings and conclusions.

***Boeing’s Senior Officers are Briefed on the November 15, 2016 Chat.***

61. In the wake of the Lion Air Crash, the DOJ began an investigation into the 737 MAX certification process. In January 2019, while collecting documents in connection with the DOJ’s investigation, members of Boeing’s Legal Department uncovered a series of communications that raised questions about the disclosures made to the FAA-AEG concerning the differences training and manuals certification, including the November 15, 2016 Chat in which Boeing Employee-1 wrote that he had “lied to regulators (unknowingly)” about MCAS.

62. In or around January 2019, Boeing’s in-house counsel informed Muilenburg and other senior executives about the existence of the November 15, 2016 Chat. Following that communication, Muilenburg understood the November 15, 2016 Chat to be “concerning.”

63. The November 15, 2016 Chat – like the documentation issues highlighted in the MCAS Certification Compliance Review report – raised significant questions concerning the adequacy of Boeing’s disclosures about MCAS in connection with the FAA-AEG’s review and approval of pilot training requirements and flight manuals for the 737 MAX, including the omission of MCAS from the differences training and the flight manuals.

**E. The Ethiopian Airlines Crash and the April 2019 Statements**

64. The Ethiopian Airlines Crash occurred on March 10, 2019. Once again, accident investigators determined that the accident involved repeated unintended activations of MCAS triggered by erroneous data from an AoA sensor.

65. On March 13, 2019, three days after the Ethiopian Airlines Crash, the FAA issued an order grounding the entire 737 MAX fleet due to ongoing safety concerns; similar grounding orders were issued by regulators around the world. Ultimately, more than 20 months would elapse before the 737 MAX was once again permitted to fly.

66. The extensive negative media coverage of Boeing that followed the Lion Air Crash intensified after the Ethiopian Airlines Crash and the subsequent grounding, as did the downward pressure on Boeing’s stock price.

67. Boeing’s first quarter earnings call occurred on April 24, 2019. On that call, Muilenburg, on behalf of Boeing, responded to analysts’ questions concerning MCAS and the certification process for the 737 MAX. During the questioning, one analyst asked in relevant part: “how did this slip through the engineering organization? How did it slip through the FAA... because it doesn’t seem like there was a lot of new science going on here... [t]his seemed to be applications of existing technology to an existing platform.” Muilenburg’s answer stated in relevant part:

*[T]here is no technical slip or gap here... we know that both accidents were a series of events... in this case, there was erroneous angle-of-attack information that came into the airplane from*

multiple causes... at some point during the flight, that activated the MCAS control laws, and we know that ultimately there were actions or actions not taken that contributed to the final outcome...

But I can tell you with confidence that we understand our airplane, we understand how the design was accomplished, how the certification was accomplished, and remain fully confident in the product that we've put in the field. But we also know there are areas that we can improve, and that is the source of the software update here. ***But there was no surprise or gap or unknown here or something that somehow slipped through a certification process. Quite the opposite. We know exactly how the airplane was designed. We know exactly how it was certified. We have taken the time to understand that....***

(Emphasis added.)

68. Five days later, on April 29, during a press conference following Boeing's annual shareholders' meeting, a reporter asked Muilenburg whether the MCAS design was deeply flawed. Muilenburg, on behalf of Boeing, responded in relevant part: ***"We have gone back and confirmed again ... that we followed exactly the steps in our design and certification processes that consistently produce safe airplanes. It was designed per our standards. It was certified per our standards."*** (Emphasis added.)

69. The April 2019 Statements were misleading under the circumstances absent any discussion of the questions raised by the discovery of the November 15, 2016 Chat and the MCAS Certification Compliance Review concerning the adequacy of Boeing's disclosures to the FAA-AEG in connection with the FAA-AEG's review and approval of pilot training requirements and flight manuals for the 737 MAX. Accordingly, Boeing failed to exercise reasonable care in connection with the April 2019 Statements.

70. A reasonable investor would have considered the April 2019 Statements – in particular, the statements that “there was no surprise or gap or unknown ... that somehow slipped through [the] certification process” for the 737 MAX, and that Boeing had “gone back and confirmed ... that we followed exactly the steps in our design and certification processes that consistently produce safe airplanes” – as well as the contrary facts set forth in Paragraph 69, *supra*, that were omitted from the April 2019 Statements, to be material.

71. In or around May 2019, Boeing offered and sold \$3.5 billion of debt securities to investors.

72. In or around July 2019, Boeing offered and sold \$5.5 billion of debt securities to investors.

73. At the time of the offers and sales in May and July 2019, neither Boeing nor Muilenburg had retracted or modified the materially misleading April 2019 Statements.

74. On October 18, 2019, it was widely reported that the U.S. House of Representatives Transportation and Infrastructure Committee, which was conducting hearings relating to the 737 MAX, had obtained a series of documents concerning Boeing Employee-1's communications with the FAA-AEG, including the November 15, 2016 Chat, and would be questioning Muilenburg about those documents and related issues during his scheduled congressional testimony later that month.

75. On October 18, 2019, Boeing's stock price dropped by 6.8%, compared to a 0.4% decline for the S&P 500.

### **Violations**

76. As a result of the conduct described above, Boeing violated Sections 17(a)(2) and 17(a)(3) of the Securities Act, which prohibit any person in the offer or sale of securities from obtaining money or property by means of any untrue statement of material fact or any omission to state a material fact necessary in order to make statements made, in light of the circumstances under which they were made, not misleading, and from engaging in any practice or course of business which operates or would operate as a fraud or deceit upon the purchaser in the offer or sale of securities, respectively. Negligence is sufficient to establish violations of Sections 17(a)(2) and 17(a)(3) of the Securities Act. *Aaron v. SEC*, 446 U.S. 680, 696-97 (1980).

### **IV.**

In view of the foregoing, the Commission deems it appropriate to impose the sanctions agreed to in Respondent Boeing's Offer.

Accordingly, it is hereby ORDERED that:

A. Pursuant to Section 8A of the Securities Act, Boeing cease and desist from committing or causing any violations and any future violations of Sections 17(a)(2) and 17(a)(3) of the Securities Act.

B. Boeing shall, within 14 days of the entry of this Order, pay a civil money penalty in the amount of \$200,000,000 to the Securities and Exchange Commission. If timely payment is not made, additional interest shall accrue pursuant to 31 U.S.C. §3717.

Payment must be made in one of the following ways:

- (1) Respondent may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;
- (2) Respondent may make direct payment from a bank account via Pay.gov through the SEC website at <http://www.sec.gov/about/offices/ofm.htm>; or

- (3) Respondent may pay by certified check, bank cashier's check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center  
Accounts Receivable Branch  
HQ Bldg., Room 181, AMZ-341  
6500 South MacArthur Boulevard  
Oklahoma City, OK 73169

Payments by check or money order must be accompanied by a cover letter identifying Boeing as a Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Celeste A. Chase, Assistant Regional Director, Division of Enforcement, New York Regional Office, Securities and Exchange Commission, 100 Pearl Street, Suite 20-100, New York, NY 10004-2616.

C. Pursuant to Section 308(a) of the Sarbanes-Oxley Act of 2002, a Fair Fund is created for the penalties referenced in paragraph B above. This fund may be combined with any other distribution fund or fair fund arising out of the same facts that are the subject of this Order. Amounts ordered to be paid as civil money penalties pursuant to this Order shall be treated as penalties paid to the government for all purposes, including all tax purposes. To preserve the deterrent effect of the civil penalty, Respondent agrees that in any Related Investor Action, it shall not argue that it is entitled to, nor shall it benefit by, offset or reduction of any award of compensatory damages by the amount of any part of Respondent's payment of a civil penalty in this action ("Penalty Offset"). If the court in any Related Investor Action grants such a Penalty Offset, Respondent agrees that it shall, within 30 days after entry of a final order granting the Penalty Offset, notify the Commission's counsel in this action and pay the amount of the Penalty Offset to the Securities and Exchange Commission. Such a payment shall not be deemed an additional civil penalty and shall not be deemed to change the amount of the civil penalty imposed in this proceeding. For purposes of this paragraph, a "Related Investor Action" means a private damages action brought against Respondent by or on behalf of one or more investors based on substantially the same facts as alleged in the Order instituted by the Commission in this proceeding.

By the Commission.

Vanessa A. Countryman  
Secretary

**ATTACHMENT A -12**  
**(BOE\_ETH\_01398650)**



**From:** Webb (US), James D [REDACTED]  
**To:** Capt. Yohannes Hailemariam Seifu  
**CC:** Bradley (US), Joseph W  
**Sent:** 12/2/2018 8:21:34 PM  
**Subject:** RE: Questions to Boeing

Good evening Capt. Yohannes,

I am happy to hear that you were able to take part in the Fleet Team meeting and will attempt to answer other questions from your pilots. However, because of our Annex 13 technical support to the accident investigation, we are unable to answer questions directly related to this event. I can only address the current system and the Operations Manual Bulletin. The first two questions directly relate to the accident scenario; therefore, I will be unable to address them here. I have provided the answer to the third question below:

Third; our third question has to do with the very checklist recommended by the bulletin issued regarding the MCAS system. And that is the RUNAWAY STABILIZER checklist. This checklist commands the pilot to put the stab trim cut out switches to cut out only if the runaway continues after the autopilot is disconnected. But that is not the case with MCAS. MCAS does not continually trim down. It stops trimming, according to the bulletin, for 5 seconds if the control column trim switches are trimmed in the opposite direction. That will rule out the attempt to categorize the malfunction, if it is, as a runaway stabilizer. And by implication the use of the checklist. So in short what is the delineation between an MCAS normal operation and runaway stabilizer? **The purpose of the Operations Manual Bulletin is to raise awareness of the relationship between an erroneous AOA indication and uncommanded stabilizer movement. Specifically, if the AOA is erroneous and also high, it may be high enough to trigger the MCAS flight control law. The pilot always has trim authority to override both the Speed Trim and MCAS flight control laws with the control wheel electric trim switches and ultimate authority to power off the entire stabilizer trim system using the Stabilizer Cutout Switches. As is stated in the OMB, IF uncommanded stabilizer trim movement is experienced in conjunction with the erroneous AOA flight deck effects, the instructed course of action is to use the Stabilizer Cutout switches per the existing procedure. Additionally, in all phases of manual flight, it is expected that flight crews would use normal trim procedures to trim out undesired control forces or positions, regardless of axis – stabilizer, rudder, or aileron.**

If there are other questions with respect to the system or the bulletin, please feel free to submit them either to me or through Joe through a BCS message. We will continue to assemble the questions coming from other customers and the answers provided back to them in an effort to share with everyone the common responses we are providing.

***Captain Jim Webb***

*Chief Pilot - 737*

*Boeing Test & Evaluation, Seattle, WA*

**From:** Capt. Yohannes Hailemariam Seifu [REDACTED]  
**Sent:** Saturday, December 01, 2018 9:15 AM  
**To:** Webb (US), James D [REDACTED]  
**Cc:** Bradley (US), Joseph W [REDACTED]  
**Subject:** FW: Questions to Boeing

Dear Capt Webb,



Case 4:20-cv-00050-Document 22-1 Filed 10/08/23 Page 12 of 26  
Case 4:20-cv-00050-Document 22-1 Filed 10/08/23 Page 12 of 26  
Following the Webex last Tuesday, the pilots still have some questions to be clarified by Boeing. Please find below their questions for your review and answers. We would also like to share any relevant question(s) from other operators.

Best regards,

**From:** nathan elias [REDACTED]  
**Date:** November 28, 2018 at 14:35:04 GMT+3  
**To:** [REDACTED]  
**Subject:** Questions to Boeing  
**Reply-To:** [REDACTED]

Dear capt yohannes greetings! !

I have sent the same email via company mail but since i had a problem with my outlook, i couldn't check if you got the mail. So i have sent you this one again.

Having attended the Boeing briefing on the 27th of November, held on a tele conferencing, and after mulling on the very precarious situation where the lion air crew were, we have come up with few questions mainly related to operations. The questions are summarized as follows

First; According to the briefing there was no problem with the MCAS system at the time of the accident except being triggered at the wrong moment during the flight due to a single erroneous AOA sensor. Then why is the system designed in such a way that it operates depending on a single data source, especially when it is of a serious consequences, instead of interrogating data from other AOA sensors?

Second; Any average skilled pilot experiencing multiple failures, as it were, would react to the abnormalities depending on their sequence of urgency. Starting with a stick shaker. Because all simulator trainings , so far provided, require at the first activation of a stick shaker to react in such a way to curb the impending actual stall. It is, though, obvious that all stall warnings are not true as was the case with the Lion Air 737 Max involved in the accident. But once a pilot identified a stick shaker to be a nuisance, the next thing he would do is the AIRSPEED UNRELIABLE memory item. Not runaway stabilizer checklist. Because the AIRSPEED UNRELIABLE checklist puts a nuisance stick shaker to be an indication of unreliable airspeed. With all these in mind, how can a pilot be expected to put the trim cut out switches to cut out before dealing with the above procedures unless there is a clear guidance or a QRH procedure addressing such scenario?

Third; our third question has to do with the very checklist recommended by the bulletin issued regarding the MCAS system. And that is the RUNAWAY STABILIZER checklist. This checklist commands the pilot to put the stab trim cut out switches to cut out only if the runaway continues after the autopilot is disconnected . But that is not the case with MCAS. MCAS does not continually trim down. It stops trimming, according to the bulletin, for 5 seconds if the control column trim switches are trimmed in the opposite direction. That will rule out the attempt to categorize the malfunction, if it is, as a runaway stabilizer. And by implication the use of the checklist. So in short what is the delineation between an MCAS normal operation and runaway stabilizer?

With best regards!!



## **ATTACHMENT A -13**

**DOCUMENT PRODUCED IN NATIVE  
FORMAT**

**ATTACHMENT A-14**  
**(BOE\_ETH\_01931754)**

**From:** Sinnett (US), Michael K [REDACTED]  
**To:** Smith (US), Greg; Keating (US), Tim; Hamilton (US), John A  
**CC:** Schmidt (US), Ann M; Muilenburg (US), Dennis A; McAllister (US), Kevin; Hyslop (US), Gregory L; Luttig (US), Michael; Fennelly (US), Padraic B; Schemm (US), Kevin L; Toulouse (US), Anne C  
**Sent:** 12/7/2018 6:14:11 PM  
**Subject:** RE: Lion Updates

Anne covered the major media pieces. I wanted to provide just a little color on the LA Times interview and the NY Times interview. The LA Times discussion ran about half an hour and it was mostly answering questions and trying to stick to our key points. It was what I would describe as a transactional discussion where they asked questions and I answered them and tried to make key points.

The New York Times discussion was very different. Jim Glanz has a doctorate in physics and wanted to understand the technical aspects that are the foundation for the design and the training. It was 9 pm in New York when we started and we went a full 90 minutes. He really seemed like he was trying to understand and took the time to go deep in three or four different areas. He seemed to track it pretty well. He was pushing on two issues: 1) he believes it is important whether the different cert aspects were retained by the FAA or delegated and 2) he believed that we didn't mention MCAS because we didn't want to increase the level of training. That last point is interesting – we included several new control laws on the MAX, and when we followed the process with the FAA we added almost all of them to the FCOM and we added some to the training and checklist procedures. If we had added MCAS, it would have been a nit compared to what we had already added, and the sum total of what we had already added resulted in Level B differences training only. The important point here is that including MCAS presented no risk to increasing the training burden. But like adding any information that isn't needed, adding it does increase the risk of diluting the learning on the things that we all agree are important.

Lastly, after reviewing the spot with Gordon Bethune, it's clear that he understood our conversation and commented about training and the ease of the checklist procedure for runaway stabilizer which he mentioned goes back to the 707.

Thanks,  
Mike

Mike Sinnett  
Vice President, Product Strategy and Future Airplane Development  
Boeing Commercial Airplanes

EOA – [REDACTED]  
Chief of Staff - [REDACTED]  
Office: [REDACTED]

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**From:** Smith (US), Greg  
**Sent:** Friday, December 07, 2018 4:26 PM  
**To:** Keating (US), Tim [REDACTED]; Sinnett (US), Michael K [REDACTED]; Hamilton (US), John A [REDACTED]  
**Cc:** Schmidt (US), Ann M [REDACTED]; Muilenburg (US), Dennis A [REDACTED]; McAllister (US), Kevin [REDACTED]; Hyslop (US), Gregory L [REDACTED]; Luttig (US), Michael [REDACTED]; Fennelly (US), Padraic B [REDACTED]; Schemm (US), Kevin L [REDACTED]; Toulouse (US), Anne C [REDACTED]  
**Subject:** Lion Updates

All,  
For those that didn't make the call today, Appreciate if you could send any updates.  
Thanks  
Greg

**ATTACHMENT A-15**  
**(BOE\_ETH\_01931883)**



BOE\_ETH\_01931883

Kevin and I spoke and he asked that due to the sensitivity of the customer contract, I limit this response to the three of you plus him.

You asked what was in the Southwest contract regarding additional training cost. The New York Times asked the question: **"Did Boeing offer to pay Southwest Airlines \$1 million per aircraft delivery if the FAA determined that pilot simulator training was necessary in order for Southwest to become its launch customer?"** The simple answer is no. But it appears that someone leaked information taken in an incorrect context.

In the original contract with Southwest for the MAX, it was agreed that Boeing would reimburse Southwest Airlines for any NG-to-MAX differences training that exceeded 14 hours per pilot. (The contract initially set the trigger at 10 hours, but when the large displays were added to the MAX flight deck design, the trigger was raised to 14 hours). Southwest's differences training currently stands at about 4.5 hours (others are significantly less – American's differences training is under an hour for example). Additionally, Boeing would reimburse Southwest Airlines for any device costs that were required beyond computer based training, such as flat panel trainer costs or flight simulator costs.

Additionally, if Southwest was unable to mixed fleet fly the NG and the MAX, Boeing would pay Southwest \$1M per MAX delivery.

There is very, very close to zero risk that any of these things would be tripped. At most we've talked about having to add a 5-10 minute module to the computer based training course that describes the function of MCAS. No one has ever even suggested a risk that you couldn't mixed fleet fly the NG and MAX because of this, and again, any financial exposure risk remains extremely small. There are bigger differences between MAX and NG and they have been determined to be at most Level B (requiring only computer based training).

Hope that helps, please let me know if you've got any questions or comments.

Thanks,  
Mike

Mike Sinnett  
Vice President, Product Strategy and Future Airplane Development  
Boeing Commercial Airplanes

EOA –  
Chief of Staff –  
Office:



## **ATTACHMENT A-16**

***In the Matter of Dennis A. Muilenburg,  
Respondent., Release No. 11106 (Sept. 22,  
2022)***

**UNITED STATES OF AMERICA**  
**Before the**  
**SECURITIES AND EXCHANGE COMMISSION**

**SECURITIES ACT OF 1933**  
**Release No. 11106 / September 22, 2022**

**ADMINISTRATIVE PROCEEDING**  
**File No. 3-21141**

**In the Matter of**

**DENNIS A. MUILENBURG,**

**Respondent.**

**ORDER INSTITUTING CEASE-AND-  
DESIST PROCEEDINGS PURSUANT TO  
SECTION 8A OF THE SECURITIES ACT  
OF 1933, MAKING FINDINGS, AND  
IMPOSING A CEASE-AND-DESIST  
ORDER**

**I.**

The Securities and Exchange Commission (“Commission”) deems it appropriate that cease-and-desist proceedings be, and hereby are, instituted pursuant to Section 8A of the Securities Act of 1933 (“Securities Act”), against Dennis A. Muilenburg (“Muilenburg” or “Respondent”).

**II.**

In anticipation of the institution of these proceedings, Respondent has submitted an Offer of Settlement (the “Offer”) which the Commission has determined to accept. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission, or to which the Commission is a party, and without admitting or denying the findings herein, except as to the Commission’s jurisdiction over him and the subject matter of these proceedings, which are admitted, and except as provided herein in Section V, Respondent consents to the entry of this Order Instituting Cease-And-Desist Proceedings Pursuant to Section 8A of the Securities Act of 1933, Making Findings, And Imposing A Cease-And-Desist Order (“Order”), as set forth below.

**III.**

On the basis of this Order and Respondent’s Offer, the Commission finds<sup>1</sup> that:

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<sup>1</sup> The findings herein are made pursuant to Respondent’s Offer of Settlement and are not binding on any other person or entity in this or any other proceeding.

## **SUMMARY**

1. This matter concerns Muilenburg's failure to exercise reasonable care in approving and making statements to the public following two fatal accidents involving Boeing's new 737 MAX line of aircraft. Those failures resulted in Muilenburg and Boeing making materially misleading statements to investors in November 2018 and April 2019.

2. On October 29, 2018, a Boeing 737 MAX aircraft operated by PT Lion Mentari Airlines ("Lion Air") as Flight 610 crashed shortly after takeoff from Jakarta, Indonesia, killing all 189 passengers and crew (the "Lion Air Crash").

3. Less than five months later, on March 10, 2019, a second 737 MAX, this one operated by Ethiopian Airlines as Flight 302, crashed shortly after takeoff from Addis Ababa, Ethiopia, killing all 157 passengers and crew (the "Ethiopian Airlines Crash").

4. Accident investigations revealed that both crashes involved the erroneous activation of the Maneuvering Characteristics Augmentation System ("MCAS"), a new Boeing flight control law (not described in the 737 MAX flight manuals or pilot training materials) that was designed to help avert stalls by pushing the nose of the airplane downward without input from the crew whenever a sensor on the outside of the fuselage indicated the aircraft was approaching an angle at which a stall may occur.

5. Neither Lion Air Flight 610 nor Ethiopian Airlines Flight 302 was approaching a stall at the time MCAS activated. Rather, on both flights, an erroneous signal from the external sensor repeatedly triggered MCAS while the plane was climbing at a normal angle. On both flights, the crews were unable to regain control of the airplane following the unintended MCAS activations.

6. On March 13, 2019, three days after the Ethiopian Airlines Crash, the U.S. Federal Aviation Administration ("FAA") issued an order grounding the entire 737 MAX fleet due to ongoing safety concerns; similar grounding orders were issued by regulators around the world. Ultimately, more than 20 months would pass before a 737 MAX was once again permitted to fly.

7. In the wake of the Lion Air Crash, Boeing and Muilenburg sought to reassure the public and the market about the safety of the 737 MAX. Later, following the Ethiopian Airlines Crash and the subsequent grounding of the 737 MAX, Muilenburg sought to reassure the public and the market on behalf of Boeing that the process by which the 737 MAX was designed, tested and certified to fly complied with all applicable regulations and with Boeing's own standards and historical practices. In doing so, Muilenburg failed to exercise reasonable care resulting in public statements that were materially misleading to investors.

8. The first misleading public statement was contained in a press release issued by Boeing on November 27, 2018, following the release of the Indonesian government's preliminary report on the Lion Air Crash (the "November 2018 Press Release" or "Press Release"). Muilenburg directed the drafting of the Press Release and approved it before it was issued. In that Press Release, Boeing highlighted certain aspects of the preliminary accident report while

downplaying others, and also offered the public its “assurance” that the 737 MAX “is as safe as any airplane that has ever flown the skies.” However, by that point, Boeing had determined that MCAS posed an ongoing safety issue that required remediation; indeed, Boeing had already begun work on a redesign of the MCAS software to address the safety issue. However, the Press Release made no mention of the MCAS safety issue or planned software redesign. At the time he authorized the Press Release, Muilenburg was aware that Boeing was redesigning the MCAS software to remediate the safety issue.

9. A second set of misleading public statements was made by Muilenburg in April 2019 following the Ethiopian Airlines Crash and the 737 MAX grounding (the “April 2019 Statements”). While speaking to investors and analysts during Boeing’s first quarter 2019 earnings call on April 24, 2019, and in comments to reporters following Boeing’s annual shareholders’ meeting on April 29, 2019, Muilenburg stated on behalf of Boeing that “there was no surprise or gap or unknown ... that somehow slipped through [the] certification process” for the 737 MAX, and that Boeing had “gone back and confirmed ... that we followed exactly the steps in our design and certification processes that consistently produce safe airplanes.”

10. Prior to the April 2019 Statements, Boeing had, in responding to a subpoena issued by the U.S. Department of Justice (“DOJ”) in a criminal investigation into the 737 MAX certification process, uncovered documents that suggested that key facts about MCAS’s operational scope had not been disclosed to the FAA’s Aircraft Evaluation Group (“FAA-AEG”), the section of the FAA responsible for the review and approval of pilot training requirements and flight manuals for the 737 MAX. In addition, an internal compliance review had separately identified certain documentation gaps and inconsistencies relating to MCAS and the certification process. Muilenburg had been briefed on the existence of those documents, as well as on the core findings of the internal compliance review. However, those facts were not disclosed or otherwise known to the public when Muilenburg made his April 2019 statements.

11. Boeing offered and sold debt securities to investors after it issued the November 2018 Press Release. Boeing also offered and sold debt securities to investors after Muilenburg’s April 2019 Statements.

12. By failing to exercise reasonable care to ensure that statements in Boeing’s November 2018 Press Release and in his April 2019 Statements were not materially misleading by ensuring that all facts necessary to make those statements not misleading under the circumstances were disclosed to investors, Muilenburg violated Sections 17(a)(2) and 17(a)(3) of the Securities Act.

### **RESPONDENT**

13. **Muilenburg**, age 58, is a resident of Collinsville, Illinois. Muilenburg was Boeing’s President from December 2013 to December 2019, CEO from July 2015 to December 2019, and Chairman of the Board of Directors from March 2016 to October 2019.

## **OTHER RELEVANT ENTITY**

14. **Boeing**, a Delaware corporation headquartered in Arlington, Virginia, engages in the design, development, manufacture, sale and support of commercial jet aircraft, military aircraft, satellites, and other aerospace products. Boeing's common stock is registered under Section 12(b) of the Securities Exchange Act of 1934 ("Exchange Act") and trades on the New York Stock Exchange (under the ticker symbol "BA").

## **FACTS**

### **A. Background: The 737 MAX and MCAS**

15. Boeing's 737 line of commercial aircraft first came to market in the 1960s. Since that time, Boeing has designed, manufactured, and sold approximately 10 versions of the Boeing 737 to its customers, including commercial airlines around the world.

16. The 737 MAX is Boeing's most recent version of the 737 aircraft line. The 737 MAX was conceived after Boeing faced intense competition from one of its rival commercial airplane manufacturers to produce a fuel-efficient, single aisle plane.

17. Boeing began designing the 737 MAX in 2011 and submitted its initial application for an Amended Type Certificate ("ATC") to the FAA in 2012. In March 2017, the FAA issued an ATC to Boeing for the 737 MAX, and the new plane entered into service a few months later. Quickly after it was launched, the 737 MAX became the best-selling plane in Boeing's history.

18. Although the 737 MAX was built upon the design of its predecessor, the 737 Next Generation (the "737 NG"), some changes were made. For one thing, the engines on the 737 MAX were larger and were positioned slightly forward under the airplane's wings. These changes increased fuel efficiency but altered the aerodynamics of the 737 MAX as compared to its predecessor, particularly at higher angles-of-attack ("AoA"), a measure of the angle between the aircraft's wing and the oncoming air.

19. In an effort to make the 737 MAX handle more like the 737 NG, Boeing introduced MCAS, a computerized control that would adjust the airplane's horizontal stabilizer in the event the plane's computer received data from an external sensor (known as the AoA sensor) indicating that the angle of the airplane was too steep, which could cause the plane to stall. MCAS was designed to make the necessary adjustments without input from the crew.

20. MCAS was originally designed to operate only under conditions involving both high speeds (Mach 0.6-0.8) and high AoA, conditions that were "outside the normal flight envelope." MCAS was therefore not expected to engage during the course of a normal commercial flight.

21. Later in the design and certification process, however, Boeing expanded the operational scope of MCAS to address a tendency of the 737 MAX to pitch upwards at high AoA even at lower speeds. To achieve this, Boeing widened the speed range within which MCAS could

operate to Mach 0.2-0.8, now encompassing speeds at which a commercial flight would regularly travel, and also expanded MCAS's command authority, or the degree to which MCAS could push down the nose of the plane, at lower speeds (the "MCAS Expansion").

**B. U.S. Regulators Approve the Pilot Training Requirements and Flight Manuals for the 737 MAX without Knowledge of the MCAS Expansion.**

22. When a derivative of an existing aircraft model enters service, pilots certified to fly the previous model can become certified to fly the new model by undergoing "differences training," a training course focused on those aspects of the new model (here, the 737 MAX) that are meaningfully different from the previous model (here, the 737 NG). As a general matter, the greater the similarity between the two models, the less differences training is required, reducing training costs incurred by operators of the aircraft.

23. In connection with the overall evaluation, approval and certification process for a derivative airplane, the FAA-AEG is responsible for determining the required level of differences training for U.S.-based airline pilots – and, relatedly, the extent to which new or updated functions must be described in the flight manuals – based on information provided, and recommendations made, by manufacturers such as Boeing. At the end of this process, the FAA-AEG publishes a Flight Standardization Board Report (the "FSB Report") which contains, among other things, the FAA-AEG's determination on the level and scope of differences training and the contents of the flight manuals.

24. Here, Boeing took the view that pilots transitioning from the 737 NG to the 737 MAX should be required to undergo only a short computer-based training ("CBT") course, as opposed to more extensive, simulator-based training. Indeed, even before certification, Boeing advertised, and, in some cases, contractually guaranteed, to its airline customers that only CBT would be required for 737 NG pilots to operate the 737 MAX. For instance, one purchase agreement with a major airline required Boeing to refund up to \$1 million per plane in the event the FAA required more than CBT for 737 MAX pilots.

25. In advocating for CBT only, Boeing employees responsible for communicating with the FAA-AEG as to differences training and manuals certification – including Boeing Employee-1 and Boeing Employee-2, senior members of the 737 MAX Flight Technical Group – presented MCAS to the FAA-AEG as a feature that could only activate in a very specific, high-speed scenario that was outside the normal flight envelope and therefore unlikely to ever be encountered by a commercial pilot. They made these representations to FAA-AEG personnel beginning in or around June 2015.

26. In or around March 2016, Boeing introduced the MCAS Expansion, significantly broadening MCAS's operational scope. No longer limited to a specific, rare high-speed scenario, MCAS could now activate at abnormally high AoA throughout the entire speed range of the 737 MAX, including during the initial climb and the final descent, and its command authority was significantly increased to allow it to function effectively at lower speeds.

27. In or around August 2016, the FAA-AEG made a provisional determination to accept Boeing's proposal of CBT-only and to omit MCAS from the differences training and flight manuals. At that time, the FAA-AEG was not aware of the MCAS Expansion.<sup>2</sup>

28. Boeing employees responsible for communicating with the FAA-AEG understood, as evidenced by internal emails, that this provisional determination was contingent on there being "no significant systems changes to the airplane," and that the subsequent disclosure of additional differences to the FAA-AEG "would be a huge threat to that differences training determination."

29. On or about November 15, 2016, during a test flight of the 737 MAX in a simulator, Boeing Employee-1 experienced what Boeing Employee-1 recognized as MCAS operating at lower speed. Later that day, Boeing Employee-1 and Boeing Employee-2 discussed MCAS in an electronic chat (the "November 15, 2016 Chat") which contained the following exchange:

**Boeing Employee-1:** Oh shocker alert! / MCAS is now active down to M[ach] .2 / It's running rampant in the sim[ulator] on me... / so I basically lied to the regulators (unknowingly)

**Boeing Employee-2:** [I]t wasn't a lie, no one told us that was the case

30. Following this exchange, Boeing employees responsible for communicating with the FAA-AEG did not inform the FAA-AEG about the MCAS Expansion. And in a January 17, 2017 email to the FAA-AEG, Boeing Employee-1 reminded the FAA-AEG to delete any references to MCAS from the FSB Report, saying "Flight Controls: Delete MCAS, recall we decided we weren't going to cover it in the [manuals] or the CBT ... since it's way outside the normal operating envelope."

31. On or about July 5, 2017, the FAA-AEG published the FSB Report, which omitted any information about MCAS. Consistent with the determinations made by the FAA-AEG as reflected in the published FSB Report, MCAS was not described in the 737 MAX flight manuals or pilot training materials, and was not part of the required differences training for pilots transitioning to the 737 MAX when the 737 MAX entered into service in mid-2017.

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<sup>2</sup> The MCAS Expansion was reflected in certification documents provided to a different group within the FAA that was responsible for determining whether the 737 MAX met U.S. federal airworthiness certification standards; however, that group was not involved in the review and approval of pilot training requirements and flight manuals.



**C. The Lion Air Crash and the November 2018 Press Release**

***Boeing's Safety Review Board Determines that MCAS Poses a Safety Issue that Requires Remediation, and Boeing Engineers Begin Work on a Software Redesign.***

32. The Lion Air Crash occurred on October 29, 2018. Soon after the crash, investigators identified repeated unintended activations of MCAS triggered by erroneous AoA data as a cause of the accident.

33. In the weeks following the Lion Air Crash, Boeing convened a series of meetings of its Safety Review Board (“SRB”) – an internal body comprised of Boeing personnel that evaluate in-service aircraft safety issues – on November 4, 2018, November 6, 2018, and November 15, 2018, to assess the ongoing safety of the 737 MAX in light of the Lion Air Crash.

34. The SRB determined that the high crew workload required to counter repeated unintended MCAS activation triggered by erroneous AoA data, and the limited amount of time a crew might have to do so before the airplane became unrecoverable (as happened on the Lion Air Crash flight), posed an “airplane safety issue” that required remediation. The crew workload issue was compounded by the presence of other distracting visual, auditory, and tactile alerts and warnings associated with a damaged or malfunctioning AoA sensor on the 737 MAX.

35. On November 6, 2018, Boeing issued a bulletin to operators of 737 MAX aircraft informing them that erroneous AoA data could cause uncommanded nose-down movements of the aircraft (without mentioning MCAS by name). The bulletin instructed pilots to follow the procedures in the flight manuals for a “runaway stabilizer” – a type of malfunction that could present as similar to repeated unintended MCAS activations on the 737 MAX – in the event of uncommanded nose-down movement.

36. On November 7, 2018, the FAA issued a public emergency airworthiness directive to airlines operating the 737 MAX, informing them of the potential for repeated nose-down movements of the aircraft which, “if not addressed, could cause the flight crew to have difficulty controlling the airplane ... and [could result in] possible impact with terrain.” The airworthiness directive identified the issue as an “unsafe condition” on the 737 MAX, and, as an “interim action” pending further analysis, referred crews to the runaway stabilizer procedures described in Boeing’s November 6 bulletin.

37. On or about November 15, 2018, Boeing safety engineers concluded that, in light of the SRB’s findings, the MCAS software should be redesigned and re-installed on the 737 MAX fleet to remediate the high crew workload “airplane safety issue.” They determined that the software redesign had to be completed within approximately 27 months, but that the 737 MAX fleet could continue to operate in the interim in light of Boeing’s bulletin and the FAA emergency airworthiness directive.

38. Around the same time, the FAA conducted its own safety analysis and reached conclusions similar to those reached by the Boeing SRB, including that the Boeing 737 MAX



could continue to operate pending remediation of the MCAS-related crew workload issue; however, the FAA review concluded that a software redesign would have to be completed within approximately 8 months (later shortened to approximately 7 months).

***Boeing Assures the Public that the 737 MAX is “as Safe as Any Airplane that has Ever Flown the Skies” while Working to Remediate the “Airplane Safety Issue.”***

39. On or about November 15, 2018, senior executives at Boeing, including Muilenburg, were informed that the SRB had identified the crew workload issue associated with unintended MCAS activation due to erroneous AoA data as an “airplane safety issue” that required remediation, and that Boeing engineers were working on redesigning the MCAS software to address the issue.

40. Also, on or about November 15, 2018, Boeing’s Communications team began working with senior Boeing engineers and lawyers, among others, to draft a press release to update the public following the Lion Air Crash (the “Draft Press Release”), which would evolve to become the November 2018 Press Release.

41. Early versions of the Draft Press Release generally confirmed the plane’s safety, stating that the 737 MAX was either a “safe airplane” or that it “continue[d] to be safe to fly.” Certain versions also noted that Boeing was working with the FAA to “expedite the development and certification of a flight control software update” for MCAS.

42. During this time period, Boeing was the subject of extensive negative media coverage over allegations that Boeing had withheld information from pilots, airlines, regulators and the general public regarding MCAS. Other articles raised concerns about MCAS being too powerful and/or relying on a single sensor, and about the integrity of the certification process for the 737 MAX.

43. Boeing’s stock price was also dropping during this time. By November 20, 2018, Boeing’s stock price had fallen by 11.6% since the Lion Air Crash.

44. On November 20, 2018, Muilenburg expressed disappointment in Boeing’s response to the negative post-crash media coverage, stating in an email that “[w]e are spending too much time playing defense... [we] need to start playing some offense.”

45. The next day, an official at the U.S. National Transportation Safety Board (“NTSB”) emailed Boeing a draft of the preliminary report on the Lion Air accident investigation (the “Lion Air Preliminary Report”), which was expected to be released to the public by the Indonesian government within the coming days.

46. Later that day, the Communications team sent Muilenburg and other executives an updated version of the Draft Press Release. After reviewing the draft, Muilenburg directed that the Draft Press Release be modified to incorporate a discussion of facts drawn from the Lion Air Preliminary Report, and also suggested removing discussion of the planned MCAS software redesign from the Draft Press Release.

47. On November 24, 2018, the Communications team began revising the Draft Press Release in accordance with Muilenburg's instructions. As a result, the Draft Press Release underwent significant changes as its focus shifted to the Lion Air Preliminary Report.

48. From that point forward, the Draft Press Release no longer mentioned the development of an "MCAS software update," and also stated that Boeing's customers and passengers "have [Boeing's] assurance that the 737 MAX is as safe as any airplane that has ever flown the skies." In the days that followed, Muilenburg and other executives worked with the Communications team to further revise the Draft Press Release.

49. On the afternoon of November 27, 2018, Muilenburg approved the issuance of the November 2018 Press Release via email, writing, "Looks great – factual, and sticks to the report while making our key points. Good to go here ...." The November 2018 Press Release was published on Boeing's website that evening, just after the public release of the Lion Air Preliminary Report by the Indonesian government.

50. The November 2018 Press Release highlighted certain facts from the Lion Air Preliminary Report suggesting that pilot error and poor airplane maintenance by Lion Air had contributed to the crash. The November 2018 Press Release did not mention that the SRB had identified an ongoing "airplane safety issue" associated with MCAS or the planned software redesign – indeed, it did not mention MCAS at all. The final November 2018 Press Release also contained the statement: "As our customers and their passengers continue to fly the 737 MAX to hundreds of destinations around the world every day, they have our assurance that the 737 MAX is as safe as any airplane that has ever flown the skies."

51. Prior to the issuance of the November 2018 Press Release, Boeing provided drafts to the FAA and NTSB for informational purposes, and those drafts contained the "as safe as any airplane that has ever flown the skies" language. After the November 2018 Press Release was published, a senior official at the NTSB complained to Boeing, via email, that the November 2018 Press Release was not appropriate given Boeing's involvement in the crash investigation, and that "the omission of certain facts and the highlighting of other facts [in the November 2018 Press Release] leads the reader to Boeing's analytical conclusion."

52. On November 28, 2018, the first trading day following the public release of the Lion Air Preliminary Report and Boeing's after-hours publication of the November 2018 Press Release, Boeing's stock closed at \$333.5, up 4.8% from the prior day's close (compared to a 2% gain for the S&P 500).

53. The November 2018 Press Release – in particular, the statement that "the 737 MAX is as safe as any airplane that has ever flown the skies" – was misleading under the circumstances absent any discussion of an "airplane safety issue" that required remediation by fixing the MCAS software. Accordingly, Muilenburg failed to exercise reasonable care in connection with the November 2018 Press Release.

54. A reasonable investor would have considered the statement in the November 2018 Press Release that “the 737 MAX is as safe as any airplane that has ever flown the skies,” as well as contrary facts set forth in Paragraph 53, *supra*, that were omitted from the November 2018 Press Release, to be material.

55. In or around February 2019, Boeing offered and sold \$1.5 billion of debt securities to investors. At the time of the offers and sales, Boeing had neither retracted nor modified the materially misleading statement contained in the November 2018 Press Release.

**D. The Boeing Certification Compliance Review and Discovery of “Concerning” Documents Relating to MCAS Differences Training and Manuals**

***Boeing’s Compliance Review Identifies Documentation Gaps and Inconsistencies in the Certification Process Relating to MCAS.***

56. On or about November 21, 2018, Boeing senior management assembled a team to review the 737 MAX certification process with a particular focus on MCAS (the “MCAS Certification Compliance Review”), led by a senior Boeing engineer who was familiar with the 737 MAX design, but who had not been directly involved in the certification process. The MCAS Certification Compliance Review team was specifically directed to include in its review aspects of the certification process relating to differences training and flight manuals.

57. The MCAS Certification Compliance Review team presented its initial findings and conclusions to Boeing senior engineering and compliance personnel, together with representatives of the FAA, on or about December 17, 2018, in a live presentation accompanied by a written report. Muilenburg was briefed on the core findings around this time as well. While the written report was further reviewed over the next several months, the core findings and conclusions did not change.

58. The MCAS Certification Compliance Review ultimately concluded that the certification process with respect to MCAS was compliant with FAA regulations. However, the written report identified several documentation gaps and inconsistencies relating to MCAS and the certification process, including a lack of adequate supporting documentation for the assumption, used by Boeing engineers and test pilots throughout the design and testing process, that repeated unintended MCAS activations (as the crew of Lion Air Flight 610 experienced) would be no more hazardous than a single unintended MCAS activation – an assumption that was later called into doubt by the SRB.

59. The MCAS Certification Compliance Review report also noted that the supporting rationale for the decision to remove MCAS from the differences training and flight manuals was not properly documented and had been made contemporaneously with the MCAS Expansion. These findings raised questions as to whether the FAA-AEG had been made aware of, and had an opportunity to evaluate, the MCAS Expansion when it agreed to Boeing’s proposal to remove MCAS from the differences training and manuals.

60. The MCAS Certification Compliance Review team was not aware of the November 15, 2016 Chat. Consequently, the November 15, 2016 Chat was not referenced in the MCAS Certification Compliance Review report and did not factor into its findings and conclusions.

***Boeing's Senior Officers are Briefed on the November 15, 2016 Chat.***

61. In the wake of the Lion Air Crash, the DOJ began an investigation into the 737 MAX certification process. In January 2019, while collecting documents in connection with the DOJ's investigation, members of Boeing's Legal Department uncovered a series of communications that raised questions about the disclosures made to the FAA-AEG concerning the differences training and manuals certification, including the November 15, 2016 Chat in which Boeing Employee-1 wrote that he had "lied to regulators (unknowingly)" about MCAS.

62. In or around January 2019, Boeing's in-house counsel informed Muilenburg and other senior executives about the existence of the November 15, 2016 Chat. Following that communication, Muilenburg understood the November 15, 2016 Chat to be "concerning." Muilenburg did not take any steps to learn additional details about the November 15, 2016 Chat.

63. The November 15, 2016 Chat – like the documentation issues highlighted in the MCAS Certification Compliance Review report – raised significant questions concerning the adequacy of Boeing's disclosures about MCAS in connection with the FAA-AEG's review and approval of pilot training requirements and flight manuals for the 737 MAX, including the omission of MCAS from the differences training and the flight manuals.

**E. The Ethiopian Airlines Crash and the April 2019 Statements**

64. The Ethiopian Airlines Crash occurred on March 10, 2019. Once again, accident investigators determined that the accident involved repeated unintended activations of MCAS triggered by erroneous data from an AoA sensor.

65. On March 13, 2019, three days after the Ethiopian Airlines Crash, the FAA issued an order grounding the entire 737 MAX fleet due to ongoing safety concerns; similar grounding orders were issued by regulators around the world. Ultimately, more than 20 months would elapse before the 737 MAX was once again permitted to fly.

66. The extensive negative media coverage of Boeing that followed the Lion Air Crash intensified after the Ethiopian Airlines Crash and the subsequent grounding, as did the downward pressure on Boeing's stock price.

67. Boeing's first quarter earnings call occurred on April 24, 2019. On that call, Muilenburg, on behalf of Boeing, responded to analysts' questions concerning MCAS and the certification process for the 737 MAX. During the questioning, one analyst asked in relevant part: "how did this slip through the engineering organization? How did it slip through the FAA... because it doesn't seem like there was a lot of new science going on here... [t]his seemed to be

applications of existing technology to an existing platform.” Muilenburg’s answer stated in relevant part:

*[T]here is no technical slip or gap here... we know that both accidents were a series of events... in this case, there was erroneous angle-of-attack information that came into the airplane from multiple causes... at some point during the flight, that activated the MCAS control laws, and we know that ultimately there were actions or actions not taken that contributed to the final outcome...*

But I can tell you with confidence that we understand our airplane, we understand how the design was accomplished, how the certification was accomplished, and remain fully confident in the product that we’ve put in the field. But we also know there are areas that we can improve, and that is the source of the software update here. *But there was no surprise or gap or unknown here or something that somehow slipped through a certification process. Quite the opposite. We know exactly how the airplane was designed. We know exactly how it was certified. We have taken the time to understand that....*

(Emphasis added.)

68. Five days later, on April 29, during a press conference following Boeing’s annual shareholders’ meeting, a reporter asked Muilenburg whether the MCAS design was deeply flawed. Muilenburg, on behalf of Boeing, responded in relevant part: *“We have gone back and confirmed again ... that we followed exactly the steps in our design and certification processes that consistently produce safe airplanes. It was designed per our standards. It was certified per our standards.”* (Emphasis added.)

69. The April 2019 Statements were misleading under the circumstances absent any discussion of the questions raised by the discovery of the November 15, 2016 Chat and the MCAS Certification Compliance Review concerning the adequacy of Boeing’s disclosures to the FAA-AEG in connection with the FAA-AEG’s review and approval of pilot training requirements and flight manuals for the 737 MAX. Accordingly, Muilenburg failed to exercise reasonable care in making the April 2019 Statements.

70. A reasonable investor would have considered the April 2019 Statements – in particular, the statements that “there was no surprise or gap or unknown ... that somehow slipped through [the] certification process” for the 737 MAX, and that Boeing had “gone back and confirmed ... that we followed exactly the steps in our design and certification processes that consistently produce safe airplanes” – as well as the contrary facts set forth in Paragraph 69, *supra*, that were omitted from the April 2019 Statements, to be material.

71. In or around May 2019, Boeing offered and sold \$3.5 billion of debt securities to investors.

72. In or around July 2019, Boeing offered and sold \$5.5 billion of debt securities to investors.

73. At the time of the offers and sales in May and July 2019, neither Boeing nor Muilenburg had retracted or modified the materially misleading April 2019 Statements.

74. On October 18, 2019, it was widely reported that the U.S. House of Representatives Transportation and Infrastructure Committee, which was conducting hearings relating to the 737 MAX, had obtained a series of documents concerning Boeing Employee-1's communications with the FAA-AEG, including the November 15, 2016 Chat, and would be questioning Muilenburg about those documents and related issues during his scheduled congressional testimony later that month.

75. On October 18, 2019, Boeing's stock price dropped by 6.8%, compared to a 0.4% decline for the S&P 500.

### **Violations**

76. As a result of the conduct described above, Muilenburg violated Sections 17(a)(2) and 17(a)(3) of the Securities Act, which prohibit any person in the offer or sale of securities from obtaining money or property by means of any untrue statement of material fact or any omission to state a material fact necessary in order to make statements made, in light of the circumstances under which they were made, not misleading, and from engaging in any practice or course of business which operates or would operate as a fraud or deceit upon the purchaser in the offer or sale of securities, respectively. Negligence is sufficient to establish violations of Sections 17(a)(2) and 17(a)(3) of the Securities Act. *Aaron v. SEC*, 446 U.S. 680, 696-97 (1980).

### **IV.**

In view of the foregoing, the Commission deems it appropriate to impose the sanctions agreed to in Respondent Muilenburg's Offer.

Accordingly, it is hereby ORDERED that:

A. Pursuant to Section 8A of the Securities Act, Respondent Muilenburg cease and desist from committing or causing any violations and any future violations of Sections 17(a)(2) and 17(a)(3) of the Securities Act.

B. Muilenburg shall, within 14 days of the entry of this Order, pay a civil money penalty in the amount of \$1,000,000 to the Securities and Exchange Commission. If timely payment is not made, additional interest shall accrue pursuant to 31 U.S.C. §3717.



Payment must be made in one of the following ways:

- (1) Respondent may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;
- (2) Respondent may make direct payment from a bank account via Pay.gov through the SEC website at <http://www.sec.gov/about/offices/ofm.htm>; or
- (3) Respondent may pay by certified check, bank cashier's check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center  
Accounts Receivable Branch  
HQ Bldg., Room 181, AMZ-341  
6500 South MacArthur Boulevard  
Oklahoma City, OK 73169

Payments by check or money order must be accompanied by a cover letter identifying Muilenburg as a Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Celeste A. Chase, Assistant Regional Director, Division of Enforcement, New York Regional Office, Securities and Exchange Commission, 100 Pearl Street, Suite 20-100, New York, NY 10004-2616.

C. Pursuant to Section 308(a) of the Sarbanes-Oxley Act of 2002, a Fair Fund is created for the penalties referenced in paragraph B above. This fund may be combined with any other distribution fund or fair fund arising out of the same facts that are the subject of this Order. Amounts ordered to be paid as civil money penalties pursuant to this Order shall be treated as penalties paid to the government for all purposes, including all tax purposes. To preserve the deterrent effect of the civil penalty, Respondent agrees that in any Related Investor Action, he shall not argue that he is entitled to, nor shall he benefit by, offset or reduction of any award of compensatory damages by the amount of any part of Respondent's payment of a civil penalty in this action ("Penalty Offset"). If the court in any Related Investor Action grants such a Penalty Offset, Respondent agrees that he shall, within 30 days after entry of a final order granting the Penalty Offset, notify the Commission's counsel in this action and pay the amount of the Penalty Offset to the Securities and Exchange Commission. Such a payment shall not be deemed an additional civil penalty and shall not be deemed to change the amount of the civil penalty imposed in this proceeding. For purposes of this paragraph, a "Related Investor Action" means a private damages action brought against Respondent by or on behalf of one or more investors based on substantially the same facts as alleged in the Order instituted by the Commission in this proceeding.

V.

It is further Ordered that, solely for purposes of exceptions to discharge set forth in Section 523 of the Bankruptcy Code, 11 U.S.C. §523, the findings in this Order are true and admitted by Respondent, and further, any debt for disgorgement, prejudgment interest, civil penalty or other amounts due by Respondent under this Order or any other judgment, order, consent order, decree or settlement agreement entered in connection with this proceeding, is a debt for the violation by Respondent of the federal securities laws or any regulation or order issued under such laws, as set forth in Section 523(a)(19) of the Bankruptcy Code, 11 U.S.C. § 523(a)(19).

By the Commission.

Vanessa A. Countryman  
Secretary